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Historical Geography of the North Carolina Outer Banks.

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HISTORICAL GEOGRAPHY OF THE NORTH CAROLINA
OUTER BANKS

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

in

The Department of Geography and Anthropology

by

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B. A., University of Virginia, 1952
M. A., University of Virginia, 1953
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ABSTRACT

The term Outer Banks refers to the barrier chain between Cape Lookout and the Virginia state line. Early known as a result of the Raleigh Roanoke ventures, the Banks received their first permanent settlers in the late 17th and early 18th centuries when stock raisers from Virginia and from the Albemarle were seeking marsh and island locations for their stock. The difficult inlets early necessitated resident pilots. The early settlers on the Banks were not shipwrecked sailors, as is popularly believed, but were herders and pilots who derived immediately from the Albemarle and Chesapeake areas.

A barrier to navigation, the Banks proved to be a bulwark of defense, a difficult coast to which to lay siege. Since the early commerce of Northeastern North Carolina was in great part maritime and used the inlets, the Banks were personally involved in all wars up to and including the Civil War.

As use of the Banks for stock raising declined, commercial fishing became the leading occupation. Government service became an important means of livelihood after the Life Saving (later Coast Guard) Stations were established beginning in the late 1870's but has lately declined as most of the Coast Guard stations have been decommissioned. Although

the 1950 census shows that fishing is still the principal single occupation on the Banks, the Bankers are turning increasingly to various aspects of the tourist business.

CHAPTER I

INTRODUCTION

This study is part of a project which the Coastal Studies Institute of Louisiana State University has undertaken for the National Park Service and the Office of Naval Research. The writer received partial support from these agencies throughout much of the time that he has worked on the project. Others engaged in studies in the Cape Hatteras National Seashore Recreational Area were Dr. William Haag, Archaeology; Dr. Robert Treadwell, Mr. George Markey, and Mr. Robert Collins, Geology and Geomorphology; and Dr. Clair Brown, Botany.

The North Carolina Outer Banks constitute the barrier chain¹ between Cape Lookout and the Virginia line. The term "banks" itself is probably the only topographic term unique to North Carolina. Formerly found, although uncommonly, in other areas, it is now confined to North Carolina.² The term "outer banks" is a recent one, and there is no uniformity in definition of its limits. Some take it to mean the barrier islands all the way from the Virginia line to Cape Lookout or even to Beaufort Inlet. Others reserve the term "outer banks" only for the islands of Hatteras and Ocracoke, which lie furthest from the mainland. The limits of this study will be Portsmouth in the south and the Virginia line in the

north. Portsmouth was chosen as the southern limit because it is the most southerly settlement on the Outer Banks. Such islands as Roanoke and Colington are included in this study because of their proximity and cultural similarities to the Outer Banks.

Such barrier islands are by no means unique to North Carolina, but nowhere else do they occur so far from the mainland. Pamlico Sound, the largest embayment formed behind barrier islands along the Atlantic Coast of the United States, attains a maximum width of twenty-six miles.³ All of the sounds separating the Banks from the mainland are very shallow. Pamlico is the deepest with an average depth of twelve and one-half feet and a maximum of twenty-two feet, and Core Sound is the shallowest with an average depth of slightly under four feet.⁴ The width and shallowness of these sounds are probably the two most important physical factors influencing the settlement of the Banks.

The Banks themselves vary in width from about one-quarter mile in places up to nearly three miles in the Cape Hatteras and Kitty Hawk areas. A typical profile across the Banks would look something like this:

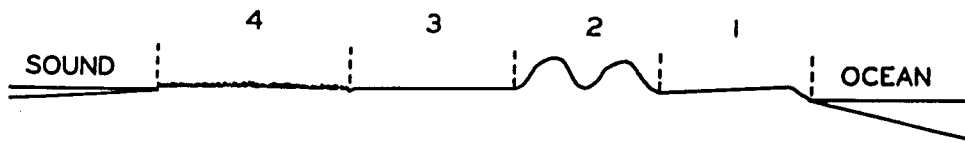


Fig. 1

Idealized profile across Ocracoke Island at about its midpoint. Width - one-half mile; vertical exaggeration - ten times.

The topographic and vegetational sequence proceeding from ocean to sound on this profile would be approximately as follows:⁵

1. Beach - unvegetated, berm about four feet above sea level.
2. Dunes. The average height above sea level of the dunes on Ocracoke is about 15 feet, and the maximum there is about 28 feet. The highest dunes, up to about 100 feet, are in the Nags Head-Kill Devil Hills area and near Corolla. On the outer dunes are found sea oats, Uniola paniculata, rather widely spaced. Sea oats are more dense on the tops and leeward slopes of the less exposed dunes. Associated with sea oats on the less exposed dunes are the prickly pear, Opuntia spp., and the Spanish dagger, Yucca gloriosa.

3. Back of the dunes, the sea oats give way

to dense thickets which attain heights of from one to ten feet. The taller portions of the thickets are composed of yaupon, Ilex vomitoria. Associated with yaupon and often forming pure-stand thickets are the wax myrtle or bay berry, Myrica cerifera, and the southern prickly ash, Xanthoxylum Clava-Herculis. Small tree-covered areas are scattered between these yaupon thickets and the marsh or in higher places within the thickets. These woods are made up of almost pure stands of live oak, Quercus virginiana, with an occasional red cedar, Juniperus virginiana.

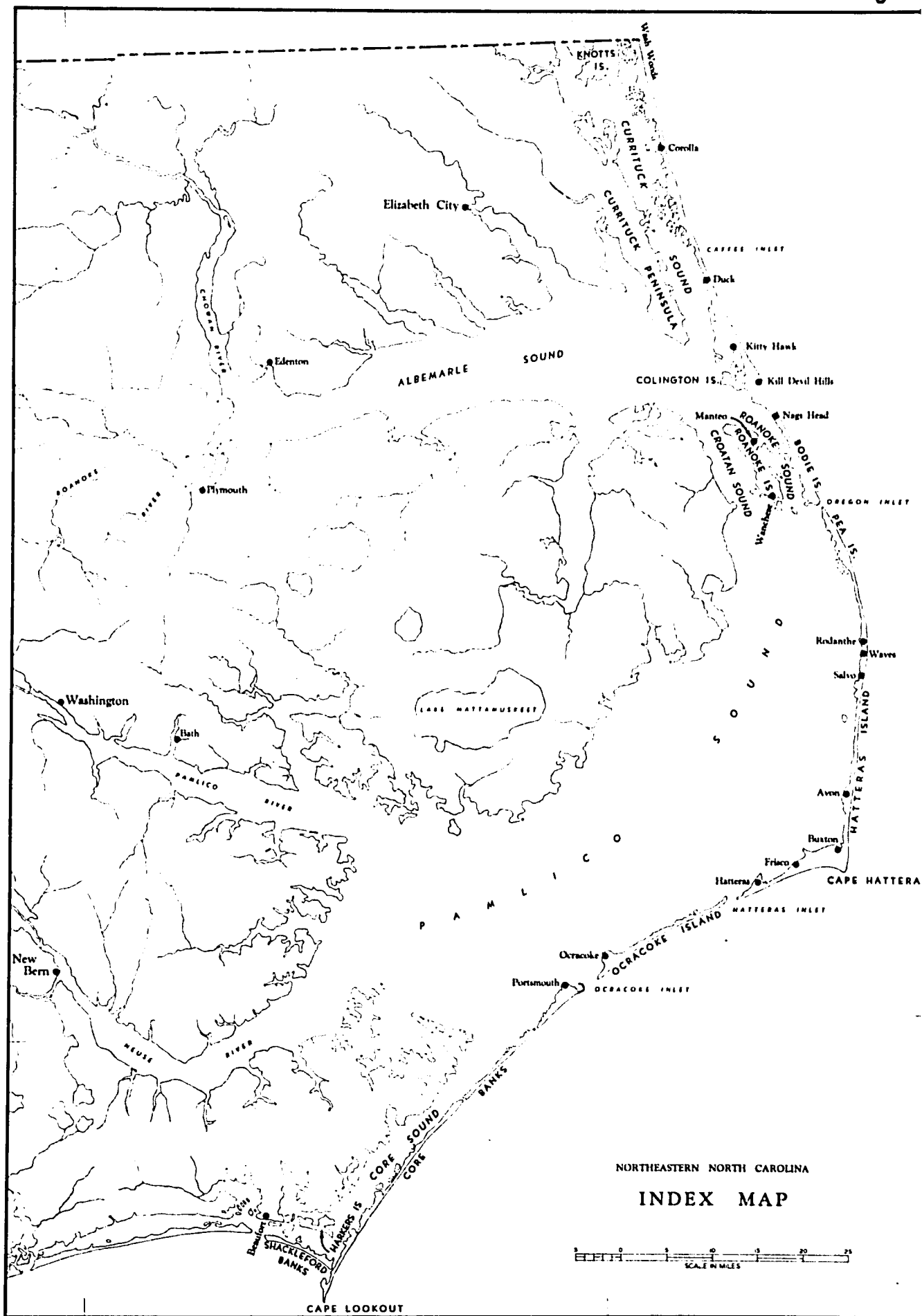
4. The marsh consists mostly of the spike rush, Juncus roemerianus, but Spartina glabra forms the outer margin toward the sound.

The narrowness of the Banks and the consequent proximity of all parts of them to water have had a moderating influence upon the climate, and many typically southern or subtropical plants, such as Spanish moss, live oak, dwarf palmetto, yaupon, southern prickly ash, and sea oats, are here well represented at or near their northern limits.⁶

One can see that a great part of the land on the Banks is a sandy waste, and one wonders what attraction it could have had for the first settlers. The abortive Raleigh Roanoke ventures showed the Banks ill-suited to become a base from which to colonize the mainland. On the contrary, the first settlers came from the main. Originally they came as stock raisers or as pilots at the inlets. As the commercial importance of the inlets declined and as free ranging of stock was shown to be uneconomic in terms of the newer ideas of

breeding for quality, fishing became the major occupation. The number of Bankers engaged in government service rose greatly after the Civil War, but fishing has remained the leading single occupation. At present, with the decline of commercial fishing and the closing of most of the Coast Guard stations, the Bankers are turning more and more to the tourist business.

It is primarily to describe the nature of the occupance of the area that this dissertation is concerned. To receive principal consideration will be such themes as the source, numbers, and distribution of the inhabitants; changes in land use and occupations; and trait acceptances and survivals. Broadly, it is intended that this dissertation will show the cultural evolution of a homogeneous, rather isolated coastal community of English descent in America.



NOTES

1. For terminology of such coastal islands, see F.P. Shepard, "Revised Nomenclature for Depositional Coastal Features," American Association of Petroleum Geologists, Bulletin, vol. 36, no. 10 (October, 1952), 1902-1912.

Shepard gives the following definitions:

Barrier Chain: "a series of barrier islands, barrier spits, and barrier beaches which extend along a considerable length of coast."

Barrier Beach: "a single elongate sand ridge rising slightly above the high-tide level and extending generally parallel with the coast, but separated from it by a lagoon."

Barrier Island: "consists of multiple instead of single ridges and commonly has dunes, vegetated zones, and swampy terranes extending lagoonward from the beach."

Also see W. A. Price, "Barrier Island, Not 'Offshore Bar,'" Science, vol. 113, no. 2939 (April 27, 1951), 487-488.

2. The earliest references to the Banks in North Carolina call them "sand banks." For a 1699 occurrence see the Colonial Records of North Carolina, vol. 1, 514. Hereafter cited as CR. For occurrences in 1709 see CR, vol. 1, 714, and John Lawson, Lawson's History of North Carolina, ed. by F. L. Harriss (Richmond: Garrett and Massie, 1937), 61, 88, 102, and 255. There are several other references to "sand banks" and "banks" in North Carolina in the 18th century.

These terms were used in coastal Virginia and Maryland in the colonial period but apparently are no longer used there. G. D. McJimsey, Topographic Terms in Virginia, American Speech Reprints and Monographs, 3, 1940, 116, gives references to "sand banks" from 1673, 1699, 1741, and 1785. W. H. Browne, ed., The Archives of Maryland, vol. 20 (Baltimore: Maryland Historical Society, 1900), 296, cites a 1695 occurrence of the term "sand banks."

The term "banker," meaning an inhabitant of the sand banks, may not ever have been used outside of North Carolina. The first occurrence of this term is from a 1752 account which mentions "the Bankers: being a people so called from their inhabiting near the banks of the sea shoar" (CR, vol. 4, 1300). James Fenimore Cooper, The Sea Lions (New York: G. P. Putnam's Sons, n. d.), 139, said, "This term of 'Panker' applies to a scattering population of wreckers and fishermen who dwell on the long, low, narrow beaches . . . from Cape Fear to near Cape Henry."

Perhaps unwittingly, Cooper mentioned another folk

term which is applied to these barrier islands: "beach." This term has been used in North Carolina synonymously with "banks." This use of "beach" to mean a sandy coastal island is not confined to North Carolina. M. M. Mathews, ed., A Dictionary of Americanisms, vol. 1 (Chicago: University of Chicago Press, 1951), 91, says that in New Jersey "beach" can refer to "a low sand island . . . lying along or parallel to the coast," and the earliest occurrence he cites is from 1743. Some of the islands on the seaside of Virginia's Eastern Shore have been called "beaches," such as Wallop's Beach, Parramore's Beach, and Matomkin's Beach. See S. Ames, Studies of the Virginia Eastern Shore in the Seventeenth Century (Richmond: The Dietz Press, 1940), Frontispiece.

3. E. W. Roelofs and D. F. Bumpus, "The Hydrography of Pamlico Sound," Bulletin of Marine Science of the Gulf and Caribbean, vol. 3, no. 3 (December, 1953), 181, 183.
4. Ibid., 183. Roelofs and Bumpus give the following figures for the estimated areas and volumes of the sounds:

	<u>Area ($10^8 m^2$)</u>	<u>Volume ($10^8 m^3$)</u>
Pamlico	43.5	166.0
Albemarle	18.2	65.4
Core	2.4	2.9
Croatan	1.2	3.4
Roanoke	<u>.96</u>	<u>1.5</u>
Total	66.3	239.2

From this table, one can derive the following figures for the average depths of the sounds:

Pamlico	3.8 meters (12.5 feet)
Albemarle	3.6 (11.8)
Croatan	2.8 (9.3)
Roanoke	1.56 (5.125)
Core	1.2 (3.96)

Unfortunately, Roelofs and Bumpus did not include Currituck Sound. N. Marshall, "Hydrography of North Carolina Marine Waters," p. 3, in H. F. Taylor et al, Survey of Marine Fisheries of North Carolina (Chapel Hill: University of North Carolina Press, 1951), has a table of estimated areas and volumes of the sounds, but his estimates are quite different from those of Roelofs and Bumpus. Currituck Sound is larger than Core Sound, and Marshall gives it an average depth of five feet, which is probably too low an estimate.

5. The topographic sequence was derived from topographic sheets, and the vegetational sequence came from W. L. Engels,

"Vertebrate Fauna of North Carolina Coastal Islands. A Study in the Dynamics of Animal Distribution. I. Ocracoke Island," American Midland Naturalist, vol. 28, no. 2 (September, 1942), 281-287.

6. Although most of these forms reach their absolute northern limit in southeastern Virginia and the Eastern Shore of Maryland and Virginia, they are rare there but grow in profusion on the Outer Banks. R. R. Tatnall, Flora of Delaware and the Eastern Shore (Wilmington: Society of Natural History of Delaware, 1946), has the following to say about the occurrence of these plants on the Eastern Shore:

P. 24. "Uniola paniculata, L. Sea oats. A southern species, here at the northern limit of its range. Collected only once - on a sandy beach, Kiptopeke."

101. "Quercus virginiana, Mill. Live oak. A single shrubby specimen in a thicket just south of Townsend."

163. "Zanthoxylum Clava-Herculis, L. Southern Prickly Ash. 'Toothache Tree.' Infrequent in Accomac and Northampton counties, near the shore."

169. "Ilex vomitoria, Ait. Yaupon. Rare, in southern Northampton County."

Cape Hatteras itself is apparently an important floral dividing line. W. W. Ashe, "The Forests of North Carolina," p. 146, in "Timber Trees and Forests of North Carolina," by G. Pinchot and W. W. Ashe, North Carolina Geological Survey, Bulletin, 6, 1897, has this to say about the coastal or maritime forests: "[The maritime forest can] be roughly separated into two divisions: one lying to the north of Cape Hatteras . . . and the other to the south of this cape. In the northern division, water oak and live oak, and red cedar form nearly the entire arborescent growth; while in the southern, with these occur the laurel oak, mock-orange, and, but irregularly distributed, the palmetto, devilwood, and magnolia. The palmetto is confined to Cape Hatteras and Smith's Island, the magnolia to the coast region of Brunswick county." Smith's Island is at the mouth of the Cape Fear River, and Brunswick County lies between Cape Fear and the South Carolina line.

Actually the floral changes are not really very abrupt. As one goes north along the coast, the southern species drop out one by one. Similarly, as one goes southward, the northern species decline. It is interesting, however, that so many of the southern plants are so well represented on the Outer Banks, not far from their absolute northern limit.

CHAPTER II

THE BANKS IN THE EXPLORATION PERIOD

The eastern seaboard of North America between Newfoundland and Florida remained for a perhaps undeservedly long time a terra incognita in the 16th century. The Spanish, content with the mineral wealth of the tropics and discouraged by their brief and unrewarding reconnaissances of Florida and adjacent areas, and the Northwest European fishermen, who prosecuted a vigorous fishery in Newfoundland waters, felt no need to fill the gap. A true test of the qualities of this intervening area had to await the coming of the English, who were late in entering into the exploration and exploitation of the New World and whose lot it thus was to acquire lands avoided by their precursors.

Probably the first European to view coastal North Carolina was Giovanni Verrazano, a Dieppe seaman, originally Florentine, who sailed along the eastern coast of North America in 1524 attempting to find a middle-latitude route to the Orient.¹ The cartographical contributions of this voyage are contained on several mappaemundi, the most famous of which is the 1529 chart of Girolamo (Hieronimus) Verrazano, Giovanni's brother.² The most important single feature of this map is the slender isthmus separating the Atlantic Ocean from an unnamed western sea. The map notation, in Italian,

reads, "From this Eastern Ocean one sees the Western Ocean. There are six miles from the one to the other."³ This remarkable feature is not mentioned in any text except the Cellere Codex, where a description of it appears in a footnote and may thus be a later addition.⁴ The footnote reads:

We called it Annunciata from the day of arrival, where was found an isthmus a mile in width and about 200 long, in which, from the ship, was seen the oriental sea between the west and north. Which is the one, without doubt, which goes about the extremity of India, China, and Cathay. We navigated along the said isthmus with the continual hope of finding some strait or true promontory at which the land would end toward the north in order to be able to penetrate to those blessed shores of Cathay.⁵

There has been no mistake in translating the Italian, the critical part of which reads, "uno isthmo de largheza de uno miglio e longo circa a 200."⁶ This "isthmus" can only be the Outer Banks of North Carolina, and the "oriental sea" is Pamlico Sound. Still to be explained is the discrepancy between the figure for the width of the isthmus given on the map and that of the footnote as quoted above. However, no other stretch of the Atlantic Coast could be described in that way. One wonders how Verrazano missed the inlets, but there is no way of telling the number and location of the inlets of his day.⁷

Estevan Gómez, a Portuguese sailing for Spain, coasted the seaboard possibly as far as 40° N. in 1525 in a vain quest for a strait leading to China.⁸ In that same year Pedro de Quexos explored the coast, possibly as far as the Chesapeake, preparatory to the establishment of a settlement in 1526 by Lucas Vázquez de Ayllón.⁹ The exact location of Ayllón's ephemeral settlement cannot be known, but most

writers prefer the Savannah River. These explorers were responsible for the nomenclature and details of coastal configuration on the official padrón general maps, which began to show a Bahía de Santa Maria in the area of the Chesapeake or of the Carolina Sounds. If this name actually referred to the sounds, then it is curious that the Banks are not depicted. Neglecting the problem of positive identification, it may be said that, however imperfect their knowledge of the details of the coast was, the Spanish at that time had sailed at least as far north as the Carolina Sounds.¹⁰

In the ensuing three decades the Spanish were little concerned with this coast and made no further attempt to explore it. In the 1550's, however, this area demanded their attention because of increasing French molestation of the Spanish plate fleet, which used the Florida Current and Gulf Stream route. As use of this route increased, a greater number of ships were wrecked on the coast, and it was seen that harbors of refuge were needed.¹¹ In 1558 Philip II demanded settlement of this coast. There was no response to this request until after 1564, when the energetic Pedro Menéndez de Avilés came into possession of Ayllón's licentiate. Subsequently, the short-lived French Huguenot colony in Florida was destroyed, St. Augustine was founded, and interest was renewed in finding a passage to the Orient. Menéndez apparently believed that the Bahía de Santa Maria was the key to this passage.¹² It was Menéndez' desire to find and explore this strait, but his duties in managing affairs in Florida and in protecting the treasure fleet prevented him from realizing

this goal. The only real expedition was that of the Jesuits in 1570-1571, which resulted in a mission being briefly established in the area of modern Virginia, probably on the York River.¹³ This mission was destroyed by hostile Indians in 1571, as Menéndez discovered when he led a relief expedition to the Chesapeake in 1572.¹⁴ In 1574 Menéndez died, and his successors did not take up immediately any plans for exploration or settlement of the Chesapeake area.

Meanwhile, interest in temperate North America was slowly building among the English, who had been, in Rowse's words, "the most backward of the significant peoples along the Atlantic littoral on the fairway to the New World."¹⁵ Cowed by the apparent might of the Iberians, the English had felt that they could ill afford to send official expeditions into any areas considered by the Spanish to be part of their domain. However, they began to lose some of this fear with the accession of the dauntless Elizabeth, and the illicit Guinea slave trade yielded profits for which the English developed an insatiable appetite.

French accounts of their abortive attempts at settlement in Florida in 1562 and 1565 stimulated English interest in North America, but it was not with Florida but with the Northwest Passage that Humphrey Gilbert was concerned when he wrote "A discourse of a discoverie for a new passage to Cataia" in 1566.¹⁶ Gilbert, then a neophyte in the circle of geographers and explorers, advocated a settlement somewhere "about Sierra Nevada" (California) as a trading and privateering base.¹⁷ This would be reached, of course, by the

Northwest Passage. Gilbert is credited with being the first Englishman to advocate actual colonization of America, to "settle there suche needie people of our Countrie, which now trouble the common welth."¹⁸

After several years of preoccupation with other ventures, Gilbert in 1578 received an exclusive royal patent "to discover searche finde out and viewe such remote heathen and barbarous landes countries and territories not actually possessed of any Christian prince or people as to him his heires and assignes and to every or any of them shall seme good And the same to have hould occupie and enjoye."¹⁹ The wording was purposefully vague to avoid trouble from the Spanish or from the Muscovy Company and the Company of Cathay. Gilbert's intention was presumably to establish a colony on the east coast of North America, one of the most important functions of which would be to serve as a privateering base against the Spanish.²⁰ His expeditions, in 1578 and 1583, came to naught; indeed on the latter Gilbert himself was lost, but his projects were carried on by his half-brother, Walter Raleigh, who obtained a renewal of the patent and dispatched Amadas and Barlowe on a brief reconnaissance voyage in 1584.

Raleigh's desire was to find a suitable site for a colony and privateering base from which to launch raids on the Spanish Indies but far enough north of Florida to be reasonably free from molestation.²¹ Amadas and Barlowe departed, probably from Plymouth, on April 27, 1584, reached the Canaries on May 10, the West Indies on June 10, struck the North Carolina coast on July 4, sailed northward for 120 miles,

and on July 13 found an "entrance, or river issuing into the Sea" which they "entred, though not without some difficultie."²² This inlet may have been the one later called Port Ferdinando, as Quinn suggests,²³ or it may have been Trinitie Harbour, as Porter states.²⁴ They anchored inside and set out in small boats to explore the adjacent Banks. During their stay, which was about six weeks, they visited the friendly Indians on Roanoke Island and explored some of the surrounding territory but not enough to show them the superior harbors which lay just to the north, on the Chesapeake. They returned to England in the middle of September and gave Raleigh a glowing account of the Banks, which they described as "most beautifull, and pleasant to behold, replenished with Deere, Conies, Hares, and diuers beastes, and about them the goodliest and beste fishe in the world, and in greatest abundance."²⁵ Raleigh used this report and Hakluyt's manuscript "Discourse of western planting"²⁶ to induce the Queen to support another expedition to the Roanoke Island area.

The choice of Roanoke Island as a colony and base was quite accidental, as knowledge of the entire Atlantic seaboard would have showed them that they could not have made a worse selection. However, they did not have any real knowledge of the coast. Spanish cartographical information had always been jealously withheld from foreigners, and only inadequate and misleading bits of it filtered up to Northern Europe. For literary references to the coast north of Florida, Hakluyt had to depend upon old, and often garbled, scraps of information or on analogies from Spanish America and from

lands of similar latitudes in the Old World.²⁷ In his "Discourse of western planting," Hakluyt cited Jean Ribault and Giovanni Verrazano as to the richness of eastern North America and gave many reasons why England should establish a colony there: as a "bridle to the Indies of the Kinge of Spaine,"²⁸ for "thinlargement of the gospell of Christe,"²⁹ and for "ymployment of nombers of idle men."³⁰ Hakluyt also urged the production in the new colony of tropical and Mediterranean products which England could then obtain only by disadvantageous trade with the countries of Southern Europe. He reasoned that Mediterranean crops could easily grow in the same latitudes in North America.³¹

To establish a colony on Roanoke Island Raleigh sent out in 1585 an expedition of 108 men under the command of Richard Grenville with Ralph Lane as "lieutenant governor."³² Arriving on the Carolina coast they attempted to enter an inlet named Wococon just south of an island by the same name.³³ There all the ships went aground on the shallow bar, and the Tiger, Grenville's 160-ton flagship, was very nearly wrecked. The Tiger had to be beached and repaired, but the other vessels got off safely. This is another example of the dangers of the coast.

During the summer the sounds were explored in pinnaces, a fort and houses were constructed on Roanoke Island, and a better harbor was sought. The inlets not offering an adequate harbor from which to launch raids on the Indies, Grenville departed in late August, with the idea that he would return the following year to bring supplies to Lane, who in the

meantime should broaden his reconnaissances to discover the necessary port site. In October Lane sent a party northward, including probably Thomas Hariot, the scientist of the expedition, and John White, the artist and cartographer. Little is known about the findings of this group; if a journal was kept, it has not been preserved. But from White's map³⁴ one can conclude that they probably confined their reconnaissance to Cape Henry and Lynnhaven Bay and learned about the James and York river areas and the Eastern Shore from the Indians. Their report to Lane, however, was enough to convince him that the colony should be moved to the Chesapeake. It was his plan to get supplies and boats from Grenville on the latter's return and then relocate his group on the Chesapeake, where vastly superior harbors could be found. Unfortunately, Grenville was late in arriving, and in the meantime Francis Drake decided to call on the Roanoke colony while returning to England from the Indies. He could not offer Lane the ships and supplies to make the move to the Chesapeake, and Lane suddenly decided to return with his men to England in Drake's ships. Grenville later searched in vain for Lane and left a small holding force at the fort.

Lane advised Raleigh that the best site for a colony and privateering base lay on the Chesapeake, and during the winter of 1586-1587 elaborate plans were made for this settlement. A corporate body, the Governor and Assistants of the City of Raleigh in Virginia, was created with John White, the artist, as Governor and twelve assistants. Around 150 colonists were chosen, each assured of 500 acres of land

in Virginia.³⁵

The expedition set out for the Chesapeake but was to stop first at Roanoke Island to pick up the small group left by Grenville. When the Carolina Banks were reached, the sailors decided that the privateering season was already too far advanced and that they would not have time to go to the Chesapeake. Therefore, White and his colonists, 110 in number,³⁶ were forced to disembark at Roanoke. White's meek capitulation leads Quinn to believe that he actually preferred Roanoke Island, which he knew very well, to the Chesapeake, of which he had little knowledge.³⁷

Near the end of August it was decided to send someone to England to insure the delivery of supplies to the Roanoke Island colony, and when no one volunteered, Governor White himself was elected to go. After his return to England, Raleigh made plans immediately to send out a small ship with supplies to Roanoke, to be followed by a larger expedition under Grenville. This ship was ready by the end of March, 1588, but at that time the Privy Council ordered all ships to make ready to join with Drake in the defense of England. It was later decided that relief could be sent out to Virginia in ships deemed by Drake unsuitable for his service. Two small ships were thus dispatched with supplies to Roanoke, but the sailors had their minds on privateering and later abandoned the voyage and returned home. No expedition was attempted in 1589, and in 1590, despite a shipping ban proclaimed in view of a possible Spanish naval attack on England, Raleigh persuaded the Queen to allow John Watts,

a privateer, to leave, provided that he would transport White and a few settlers and supplies to Roanoke. Watts' ships left without the settlers and almost without White. White was treated as an unwelcome passenger, and it vexed him that Watts spent most of his time chasing vessels and did not worry about going to Roanoke. Finally, however, they went to Virginia, and White found that his colony had disappeared and had left only two cryptic carvings as clues to their possible whereabouts: one was the word "CROATOAN" on a post at the right-hand entrance to the palisade, the other was "CRO" on a tree. These White interpreted as meaning that his people were on Croatoan Island³⁸ with Manteo and his tribe. Storms, a broken anchor cable, and a near-disaster when one of the ships almost ran aground made the sailors reluctant to explore further on this treacherous coast. They also lacked a pinnace for exploring the sounds and making anything like a comprehensive search. Therefore they went back to England without allowing White to go to Croatoan to look for his settlers.

This was to be the last expedition to Virginia for a good many years. Raleigh's attention was turned to court duties, privateering ventures,³⁹ and to Guiana. In fact, it was to his benefit not to make any search for the "Lost Colony," for he could retain his legal title to the American lands as long as he could claim to have made a permanent settlement before 1591. Thus, after 1591 there was no proof that White's colony was not still in existence, and its presumed continuance enabled Raleigh to keep the patent and

to renew his expeditions after the turn of the century.⁴⁰

There has been a great deal of speculation, mostly romantic, about the fate of the 1587 colony, but nothing has ever been found to indicate that even a single person survived. Annihilation by the Spaniards was considered a possibility until recent researches showed it to be quite unlikely.⁴¹ Absorption by the Indians is an untenable theory; destruction by them is more acceptable.⁴² The fact remains that the colony was cleanly erased and that it contributed nothing, except in its lessons, to the permanent settlement of the Banks.

Quinn succinctly summarized the Raleigh Roanoke ventures by saying, "Raleigh's colonising enterprises failed, partly because of insufficient appreciation of the complex problems which had to be surmounted in re-creating a new society far from the homeland, partly because the scale was too small and finance so precarious as to leave the colonies only a slim chance of survival."⁴³ The Jamestown colony in 1607 could start with a somewhat better knowledge of topography and natural resources as a result of the Roanoke experiments, but much had to be learned by bitter trial and error.

After the founding of Jamestown, it was necessary that a great deal of exploration and mapping be done in the Chesapeake region because White's map extended accurately only to Cape Henry. White apparently gained some knowledge of the Eastern Shore and the Peninsula from the Indians; they appear on his map almost unrecognizably out of place and proportion.⁴⁴ The Roanoke ventures had shown that Pamlico Sound could not be the Verrazano Sea, a passage to the Orient.

However, these early English explorers heard vague rumors of a large sea not far to the westward, and throughout most of the 17th century the English on the Atlantic seaboard little realized the great distance between them and the Pacific.⁴⁵ Some writers believe that the Algonkians who told the English about the nearby western sea were actually describing the Great Lakes from their folk memory.⁴⁶ One of John Smith's first instructions from the Virginia Company was to "find the other sea,"⁴⁷ but when subsequent exploration failed to disclose a strait or easy portage to a seaway to the Orient, he dismissed it as a profitable goal and concentrated on improvement of the colony.⁴⁸

As for climate, the early explorers tended to minimize the climatic differences between Virginia and Europe. "The sommer is hot as in Spaine"⁴⁹ was a common report, and while this comparison might not be a bad one as far as temperatures are concerned, humidity in dry-summer Spain is lower than in Virginia.⁵⁰ Winter in Virginia, Smith said, is "colde as in Fraunce or England."⁵¹ Comparison of the January temperatures of, say, London and Williamsburg shows that although Williamsburg has a slightly greater average for the month, it also has a greater range.⁵² Concerning winter weather in Virginia, Smith stated that "the colde is extreame sharpe, but here the proverbe is true, that no extreame long continueth."⁵³ Further north, in the Middle Colonies and in New England, the more severe winters could not be compared with England's and proved to be a very unpleasant surprise. It seemed peculiar to the colonists that all of England lay poleward of all the

American colonies, and yet the homeland experienced milder winters.⁵⁴ Other climatic phenomena with which the colonists had little or no experience were the great convectional storms, occasional droughts, and hurricanes.⁵⁵ As Sauer has said, "This was indeed a lustier land to which the settlers had come."⁵⁶

One can see that these climatic differences between America and Europe were upsetting to the time-honored tenet that lands in the same latitude necessarily had identical climates and produced identical crops. Hariot, who had spent a year in Virginia, should have been able to perceive the important differences and thus forewarn future settlers, but he did not, probably because with his optimistic report he wanted to offset the adverse accounts of conditions in Virginia which were being bruited about by some discouraged members of Lane's group.⁵⁷ He said only that the climate was "answerable to the Iland of Iapan, the land of China, Persia, Iury, the Ilandes of Cyprus and Candy, the South parts of Greece, Italy, and Spaine,"⁵⁸ the implication, of course, being that Virginia could be expected to grow the same crops which these countries produced. The brief Roanoke ventures could not provide an adequate test of these ideas, and it was left to the Jamestown colony to discover that Virginia's winters were too cold for the successful growing of many of the desired crops. Of an unsuccessful experiment, Hariot said:

We caryed thither Suger canes to plant, which beeing not so well preserued as was requisit, & besides the time of the yere being past for their setting when we arriued, we could not make that prooffe of them as wee desired. Notwithstanding, seeing that they grow in the

same climate, in the South part of Spaine and in Barbary, our hope in reason may yet continue. So likewise for Orenses and Lemmons. There may be planted also Quinses. Whereby may grow in reasonable time if the action be diligently prosecuted, no small commodities in Sugers, Suckets, and Marmalades.⁵⁹

Strachey in 1611-1612 stated that "in her Virginia's warme Vallyes may be planted, Sugar-Canes, Oranges, Lemons, & all sortes of Southren fruites, and whatsoeuer, the South-Spaine, Italy, Barbary, Greece, Iudea, & Syria bring forth being answerable to the same height latitude."⁶⁰ Strachey also told of some trials made in 1611-1612:

. . . there haue bene brought from the West-Indies, the Plants of Orange-trees, which put into the grownd carelesly and neglected have yet prospered, as also the Vynes of France, Tobacco-seed from Trinidado, Cotton-wool and Potatoes, we haue committed to the tryall of our Soyle . . .⁶¹

Again in the 1620's a test was made of certain tropical plants, importing from Bermuda and the West Indies figs, lemons, almonds, pomegranates, olives, ginger, plantains, cassava, and prickly pears.⁶² Most of these experiments either failed completely or showed little chance of success, and by this time the Virginia agriculturalists were interested almost solely in tobacco. This was not the native tobacco, Nicotiana rustica, but was the tropical species, N. tabacum, introduced to Virginia, as Strachey pointed out, from Trinidad.⁶³ The period of plant experimentation was long over by the time Albemarle County and the Outer Banks were settled by Virginians.

Hariot's Report provides a very thorough coverage of the useful native plants. Many of those which the Indians found useful were not regarded so by the whites.⁶⁴ However,

the explorers found many plants which they envisioned as profitable export products, among which were sassafras,⁶⁵ silk grass and mulberry trees,⁶⁶ grapes,⁶⁷ and pellitory.⁶⁸ The great timber resources also evoked enthusiastic comment.⁶⁹

Conspicuously absent from Harriot's list is yaupon, Ilex vomitoria Ait., the source of the famous black drink of the Southeastern Indians.⁷⁰ Apparently the trait of using yaupon had not yet diffused northward to the Secotan, and the making of yaupon tea may have been introduced into northeastern North Carolina in the late 17th century from more southerly coastal areas. This plant has always been very common on the Outer Banks; and the Banks have come to be identified with the drinking of yaupon tea.

The cultivated Indian plants were, of course, their most important legacy to the white settlers. Foremost among these were maize, beans, and cucurbits, the great "crop trilogy" of the Southeastern Indians.⁷¹ Indian stores of corn were valuable in sustaining the Lane expedition and in helping later colonies through their first winters.⁷² Also important to the Indians was the sunflower, Helianthus annuus, the seeds of which were used to make "both a kinde of bread and broth."⁷³ The tremendous yields of the seemingly inefficiently managed Indian fields were a source of constant amazement to the whites.⁷⁴

The Indians also made great use of the bountiful faunal resources. Deer were plentiful on Roanoke Island, and it has been suggested that the villages on the island were only temporary settlements seasonally occupied for the

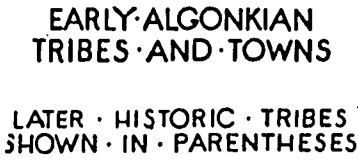


Plate II

From Maurice A. Mook, "Algonkian Ethnohistory of the Carolina Sound," Journal of the Washington Academy of Sciences, vol. 34, no. 6 (June 15, 1944), 183.

purposes of hunting deer and fishing.⁷⁵ Swanton has cited the great dependence of the Southeastern Algonkians on fish as one of the most important cultural features of the region.⁷⁶ Harriot described only two native techniques of taking fish, in weirs and by gigging,⁷⁷ but White's remarkable drawing, "The manner of their fishing,"⁷⁸ which illustrates these two methods, also shows a dip net in the Indian canoe.⁷⁹ None of the Indian fishing methods was entirely new to the whites, but the Jamestown colonists were men unskilled in fishing, and they had to rely upon Indian or very primitive means to get enough fish for bare subsistence. From May to September, 1607, the colony subsisted on "Sturghion and sea-Crabs."⁸⁰ The colonists early requested the Company to send out "sturgeon-dressers" and men skilled with seines.⁸¹ Indians then began to adopt white methods.

The precarious nature of the food supply of the first years of the Jamestown colony should be emphasized. The whites possessed several advantages over the Indians in this regard, however. One is that their guns facilitated the taking of game and wildfowl. Another is that they were not dependent upon their immediate environment; they had sea lifelines. A third very important factor was their importation of livestock.⁸²

The Jamestown colonists very early imported a goodly number of cattle, sheep, swine, and horses, but during the first winters much of the stock was eaten, and the animal population grew rather slowly.⁸³ After the first few difficult years, however, the stock multiplied greatly. The animals

enjoyed an almost unlimited range, and the only dangers of this free range were posed by Indians and wolves. Depredation by wolves appears to have been a serious deterrent only in the case of sheep.⁸⁴ To prevent decimation of the herds by Indian marauders, the stock raisers would sometimes erect a palisade, and, since fencing was expensive, the preferred location for herds was a peninsula or neck where the water already bounded the land on three sides. Of course, the perfect location would then be an island.⁸⁵ Marsh and island locations were advantageous not only for their relative isolation but also because the marsh grasses afforded just about the best provender that could be found. It has been noted that the North American continent was strikingly deficient in nutritive grasses, but of the available grasses "swale hay" and "marsh hay" were regarded as the best.⁸⁶

The growing population and the desire to acquire new land for tobacco and cattle soon led to the vigorous expansion of the Chesapeake settlements. The area that is now North Carolina commanded little attention before 1650. Some expeditions had ventured into the area. In 1620 Marmaduke Rayner made an exploring expedition to Roanoke,⁸⁷ and in 1622 John Pory made an overland journey to the Chowan River.⁸⁸ Doubtless some individuals or small parties ventured into the area for trading with the Indians or hunting, but the records are mute on this subject.

In 1641 four men petitioned the Virginia Council for leave and encouragement to undertake an expedition into the territory southwest of the Appomattox and into what is now

North Carolina.⁸⁹ Five years later two expeditions were sent out against the Indians on Albemarle Sound. One group proceeded by land and the other by water, apparently entering an inlet into Currituck Sound. One of the expedition members later returned to the area to buy some land from the Indians, but apparently no settlement was made at that time.⁹⁰

In 1650 a pamphlet published in London urged the settlement of "Carolana," particularly of the Outer Banks.⁹¹ The following year Edward Bland wrote a tract extolling the virtues of Carolana, which he called "New Brittainne."⁹² A 1653 grant for settlement on the Chowan was not taken up.⁹³ In 1654 the governor of Virginia, Francis Yardley, mentioned in a letter that small sloops were then trading in the Carolina sounds for beaver skins. Yardley sponsored a group which visited the Indians on Roanoke Island and bought land in eastern North Carolina.⁹⁴ The first direct evidence of permanent settlement in North Carolina is the Comberford Map of 1657 which shows the home of Nathaniel Batts at the western end of Albemarle Sound.⁹⁵ After that date apparently quite a few Virginians moved southward to the shores of Albemarle Sound to take up land for tobacco and cattle. Many of these settlers bought their land from the Indians. In 1662 Governor Berkeley of Virginia received directions to ignore the Indian titles in Carolina and to force the settlers to take out patents from him under the Virginia laws. On March 24, 1663 Charles II granted to eight Lords Proprietors all territory from 31° to 36° and from sea to sea.⁹⁶ Two years later this Proprietorship was increased to include all territory between 29° and

36 1/2°.97

Thus began the first permanent settlement of North Carolina, an area perhaps stigmatized by the ill success of the brief Roanoke colony 80 years before. The settlers of the 1660's were almost all Virginians, who by this time had straightened out most of the problems of pioneering in the New World and who brought with them the Virginia system of growing tobacco on riverine plantations and of stock-raising on necks and islands. The coastal islands--the Outer Banks--were first settled for the purpose of stock-raising.

NOTES

1. Verrazano's subsequent letter to King Francis describing the voyage has been preserved in three codices, all in Italian. The best known of these was that used by Ramusio in his Raccolta, vol. 3 (1556), 420, and subsequently translated and used by Hakluyt, The Principal Navigations Voyages Traffiques & Discoveries of the English Nation, vol. 8 (Glasgow: James MacLehose and Sons, 1904), 423-438, but the best text is reputed to be the Cellere Codex, discovered in 1908 by Alessandro Bacchiani. This MS is now in the Pierpont Morgan Library. It was published in photographic facsimile in 1916 by I. N. P. Stokes in vol. 2 of his Iconography of Manhattan Island. The Cellere Codex is available in Italian and in English in Alessandro Bacchiani, "Giovanni da Verrazzano and His Discoveries in North America, 1524, according to the Unpublished Contemporaneous Cellere Codex of Rome, Italy," Appendix A of American Scenic and Historic Preservation Society, Fifteenth Annual Report, 1910, 135-226. For an important interpretative study of Verrazano's voyage see W. H. Hobbs, "Verrazano's Voyage along the North American Coast in 1524," Isis, vol. 41, parts 3-4 (December, 1950), 268-277.
2. This map is now in the Vatican Gallery. Copies have been published in many places, e. g., C. O. Paullin, Atlas of the Historical Geography of the United States (Washington, D. C.: Carnegie Institution and the American Geographical Society, 1932), Plate 13; and E. D. Fite and A. Freeman, A Book of Old Maps (Cambridge: Harvard University Press, 1926), p. 50. Also see Marcel Destombes, "Nautical Charts Attributed to Verrazano (1525-1528)," Imago Mundi, vol. 11 (1954), 57-66.
3. Hobbs, op. cit., 273. This notation is not entirely legible on the printed copies of the maps, but on them one can see that the number "6" is not written out as a word as Hobbs gives it; only the number is given.
4. Bacchiani, op. cit., 185 (English) and 209 (Italian).
5. Ibid., 185. It was probably added as an afterthought to point out something of value which had resulted from an otherwise fruitless voyage. Verrazano was sent out to discover a route to the Orient; rather than report complete failure he insinuated that this water body, the other side of which he could not see, "is the one, without doubt,

which goes about the extremity of India, China, and Cathay." This sort of thing was a stock device of explorers and promoters who had to produce results on each expedition to satisfy their supporters. Since Verrazano did not make a real effort to discover the western limits of this water body, which were beyond his field of vision and thus at an indeterminable distance, the imaginative idea that it was a route to the Orient was not unwarranted and proof of it would require another voyage.

Remarkably close to Verrazano's description of the Outer Banks area was Barlowe's statement in 1584: "When we first had sight of this Countrey, some thought the first lande we sawe, to be the continent: but after wee entred into the Hauen, wee saw before vs another mightie long Sea; for there lieth along the coast a tracte of Islands two hundred miles in length, adioyning to the Ocean sea, and betweene the Islands, two or three entrances: when you are entred betweene them (these Islands being very narrowe, for the most part, as in most places sixe miles broad, in some places lesse, in fewe more,) then there appeareth another great Sea, containing in bredth in some places, fortie, and in some fiftie, in some twentie miles ouer, before you come vnto the continent . . ."

D. B. Quinn, ed., The Roanoke Voyages 1584-1590, Vol. 1 (London: Hakluyt Society, 1955), 114. Hereafter cited as Quinn, Roanoke, with no volume number because the paging of Volume 2 continues that of 1.

6. Ibid., 209.
7. At times there may have been as many as seven inlets in the area between Portsmouth, N. C., and the Virginia line, or as few as two. A figure higher than this could be entirely possible, but two may be the lowest number of inlets. There seems always to have been an inlet through the Banks in the southern portion of Pamlico Sound at or near the location of present Ocracoke Inlet and one in the Oregon Inlet-New Inlet area of northern Pamlico Sound.
8. C. M. Lewis and A. J. Loomie, The Spanish Jesuit Mission in Virginia, 1570-1572 (Chapel Hill: University of North Carolina Press, 1953), 6.
9. Ibid., 7.
10. Ibid., 7-11. See also L. D. Scisco, "Discovery of the Chesapeake Bay, 1525-1573," Maryland Historical Magazine, vol. 40, no. 4 (December, 1945), 277.
11. Lewis and Loomie, op. cit., 12-13.
12. Ibid., Plate 3, p. 19.
13. Ibid., Plate 5, p. 40.

14. Ibid., 45-55. Some Indians were slain during Menéndez' 1572 expedition. How this could affect later white-Indian relations in the area is difficult to tell. Although there may have been a few Spanish slaving forays into the coastal area north of Florida in the 16th century (Ibid., 7n), there are no grounds for James Mooney's statements: "Throughout the remainder of the sixteenth century [after Verrazano and Gómez], the Virginia coast was frequently raided by Spanish slave hunters from the West Indies . . . The Jamestown colonists landed among a people who already knew and hated the whites" ("The Powhatan Confederacy," American Anthropologist, n. s. vol. 9, no. 1 (January-March, 1907), 129. It is hard to determine just how widespread information about whites was along this coast as a result of these few expeditions and shipwrecks. The Roanoke and Jamestown colonies were both at first well received by the Indians.

In 1584 Amadas and Barlowe found that the Roanoke Indians had a tradition of a shipwrecked group, probably Spanish, about 1558 (Quinn, Roanoke, 111). Lewis and Loomie cite instances of several Spanish wrecks, 1528-1564 (op. cit., 13). The wrecked ships shown on the de Bry engraving, "The arrival of the Englishmen in Virginia" (Quinn, Roanoke, opp. 413), one of the illustrations in the 1590 de Bry edition of Thomas Hariot's A Brief and True Report of the New Found Land of Virginia, do not mean that the shore was littered with visible wrecks when the English first arrived in 1584, but are only symbols to show that care was required to pass through the inlets. This is the opinion of G. R. Crone of the Royal Geographical Society, authority on old maps (letter to the writer, October 24, 1955).

15. A. L. Rowse, The Expansion of Elizabethan England (New York: St. Martin's Press, 1955), 158. For the reasons for England's late entrance into the New World see also E. G. R. Taylor, Tudor Geography 1485-1583 (London: Methuen and Co., Ltd., 1930), 1; and L. B. Wright, "Elizabethan Politics and Colonial Enterprise," North Carolina Historical Review, vol. 32, no. 2 (April, 1955), 255. The North Carolina Historical Review will hereafter be cited as NCHR.
16. D. B. Quinn, ed., The Voyages and Colonising Enterprises of Sir Humphrey Gilbert, Vol. 1 (London: The Hakluyt Society, 1940), 5-8. This "Discourse" was published in 1576, and Quinn has reprinted it on pp. 129-165 of the above volume. Hereafter cited as Quinn, Gilbert.
17. Ibid., 161.
18. Ibid., 160-161.
19. Ibid., 189.

20. By this time he was no longer interested in the Northwest Passage or a base "about Sierra Nevada." Although the Gilbert MS map of 1582-1583, prepared by Dee, shows a strait westward from the St. Lawrence to the Pacific and follows Lok's 1582 map in showing the Verrazano Sea, it was used by Gilbert only as promotion material to attract investors. See R. P. Bishop, "Lessons of the Gilbert Map," Geographical Journal, vol. 72, no. 3 (September, 1928), 237-243, and also Quinn, Gilbert, 67-71. The Gilbert map is reproduced in Quinn, Gilbert, opp. 374, and at the end of the number (following p. 304) of the Geographical Journal which contains Bishop's article.
Lok's map, which first revived the old Verrazano Sea idea, was published by Hakluyt in 1582 to accompany his Divers voyages. Lok's motive in resuscitating the Verrazano Sea was to recoup losses engendered when, as president of the Company of Cathay, he was ruined by the Frobisher voyages. The Verrazano Sea idea was attractive in that it "offered access to the Pacific in a more congenial clime than Frobisher's Strait" (Bishop, 240). Lok's map has been reproduced in many places: Fite and Freeman, op. cit., 90; Justin Winsor, ed., Narrative and Critical History of America, vol. 3 (Boston and New York: Houghton, Mifflin and Co., 1884), 40; Quinn, Gilbert, opp. 313; and R. A. Skelton, "Explorers Maps. XI. The New World in the 16th Century," Geographical Magazine, vol. 28, no. 9 (January, 1956), 441; etc.
21. Quinn, Roanoke, 78.
22. Ibid., 92-94. As Quinn says in a footnote on 94, this difficult entry should have been a warning to later expeditions.
23. Ibid., 94n, 95n, 106n.
24. Ibid., 95n. C. W. Porter, "Fort Raleigh National Historic Site, North Carolina: Part of the Settlement Sites of Sir Walter Raleigh's Colonies of 1585-1586 and 1587," NCHR, vol. 20, no. 1 (January, 1943), 25, and Fort Raleigh (Washington: Government Printing Office, 1952), 4-5.
25. Quinn, Roanoke, 115.
26. E. G. R. Taylor, ed., The Original Writings and Correspondence of the Two Richard Hakluyts, vol. 2 (London: The Hakluyt Society, 1935), 211-326.
27. D. B. Quinn, "The Failure of Raleigh's American Colonies," Essays in British and Irish History in Honour of James Eadie Todd, ed. by H. A. Cronne, T. W. Moody, and D. B. Quinn (London: Frederick Muller, Ltd., 1949), 64-66.
28. Taylor, Hakluyts, vol. 2, 239.

29. Ibid., 214.
30. Ibid., 233.
31. The fallacious notion that climate and latitude could be strictly correlated was to plague planners and colonists throughout the early colonial period. Hakluyt and the other geographers did not realize the great climatic differences between the east and west sides of continents. Attempts to introduce tropical and Mediterranean crop plants into the colonies were also hindered by inadequate knowledge of their care. Introduction of Mediterranean crop plants and associated agronomic practices would have involved the development of a highly specialized form of agriculture with which few Englishmen were familiar. See Quinn, "Failure," 68. Some tropical plants prospered when introduced, but only because they actually were tolerant of greater temperature ranges than were found in the tropics; that is to say, although they were of tropical origin, they thrived also in lands of colder winters.
32. Grenville was the sea commander, of course, and Lane was responsible for the group when they landed.
33. This was the original form of the word Ocracoke. The inlet was near modern Ocracoke Inlet, but the exact location cannot be known. See Quinn, Roanoke, 867. His map at the end of Vol. 2 is probably as reliable a reconstruction as can be made.
34. This map has been copied in many places: Quinn, Roanoke, between 460 and 461; Hakluyt, Principal Navigations, Vol. 8, between 320 and 321; Stefan Lorant, ed., The New World (New York: Duell, Sloan and Pearce, 1946), 186; etc. The accuracy of this map is very great, and almost a century elapsed before it was improved upon. Lorant's volume is the most easily accessible source for White's famous drawings, whose detail makes them so important for the ethnohistory of the Carolina Sounds.
35. Quinn, Roanoke, 498. It should be borne constantly in mind that at this time the name "Virginia" referred to the whole east coast of North America. The name "Carolina" did not come into being until 1663, when Charles II gave the territory between 31° and 36° to eight proprietors and named the area after himself. In 1629 Charles I granted the same area to Robert Heath and called it "Carolana." See W. P. Cumming, "Naming Carolina," NCHR, vol. 22, no. 1 (January, 1945), 35-36. The name "North Carolina" for the northern part of Carolina came into being quite gradually. Albemarle County had been popularly called North Carolina for years, but perhaps 1688 marks the first use of the name in official records. See

- M. L. Skaggs, "The First Boundary Survey between the Carolinas," NCHR, vol. 12, no. 3 (July, 1935), 214.
36. Quinn, Roanoke, 498, 539-543. This included 17 women. The colony therefore might have been able to develop into a fairly stable agricultural settlement. Two children were born on Roanoke. Grenville's men were not found.
 37. Ibid., 503-504.
 38. Croatoan Island was between Cape Hatteras and Old Hatteras Inlet. See Quinn, Roanoke, 866-867.
 39. One can see that concern with privateering at the expense of the Roanoke colony contributed greatly to its failure. See L. B. Wright, "Elizabethan Politics and Colonial Enterprise," 268-269.
 40. D. B. Quinn, Raleigh and the British Empire (London: Hodder & Stoughton, Ltd., 1947), 209.
 41. Quinn, Roanoke, 717-838. See also Irene Wright, Further English Voyages to Spanish America, 1583-1594 (London: The Hakluyt Society, 1951), lxxix, 238-241, and Lewis and Loomie, op. cit., 275.
 42. The literature on the Lost Colony is voluminous. An interesting summary appears as Appendix C, "Rumors of the Lost Colony," in Lewis and Loomie, op. cit., 274-277.
 43. Quinn, "Failure," 85.
 44. Quinn, Roanoke, 854.
 45. W. P. Cumming, "Geographical Misconceptions of the Southeast in the Cartography of the Seventeenth and Eighteenth Centuries," Journal of Southern History, vol. 4, no. 4 (November, 1938), 476n. William Strachey, The Historie of Travell into Virginia Britania, ed. by L. B. Wright and V. Freund (London: The Hakluyt Society, 1953), 42, 42n. Samuel Purchas, Hakluytus Posthumus or Purchas His Pilgrimes, vol. 19 (Glasgow: James MacLehose and Sons, 1906), 113.
 46. E. H. Hall, "Henry Hudson and the Discovery of the Hudson River," American Scenic and Historic Preservation Society, Fifteenth Annual Report, 1910, Appendix B, 238n. Lewis and Loomie, op. cit., 22. The vagueness of the descriptions does not warrant this positive identification. The fact that the Algonkians entered Virginia and North Carolina from the north aids, but cannot prove, this speculation. The Algonkians' northern origin has been shown, but they had a great number of southeastern traits in their culture. See K. Birket-Smith, "Folk Wanderings and Cultural Drifts in Northern North America," Journal de la

Societe des Americanistes de Paris, vol. 22 (1930), 22; R. Flannery, An Analysis of Coastal Algonquian Culture, Catholic University, Anthropological Series, 7, 1939, 167-176, 182; M. A. Mook, "Seventeenth Century Southeastern Algonkian Ethno-History." (Unpublished doctoral thesis, University of Pennsylvania, 1943), 197-198; F. G. Speck, "The Ethnic Position of the Southeastern Algonkian," American Anthropologist, vol. 26, no. 2 (April-June, 1924), 191-193, 196-199; J. R. Swanton, "Aboriginal Culture of the Southeast," Bureau of American Ethnology, Forty-Second Annual Report, 1924-1925 (Washington: GPO, 1928), 713-714.

Swanton, 714, and Speck, 198, cite Strachey, op. cit., 40, as to the length of time the Algonkians had been in the area-about 300 years, 300 years before 1612, that is. However, Strachey gave this figure as the age of the coastal plain and said that prior to that time the Indians lived above the Falls, i. e., in the Piedmont. When the coastal plain emerged, the Indians moved down below the Falls.

47. John Smith, Travels and Works of Captain John Smith, ed. by E. Arber and A. G. Bradley, vol. 1 (Edinburgh: John Grant, 1910), xxxiv-xxxv.
48. By 1614 he was speaking of "those large Dominions which doe stretch themselves into the maine, God doth know how many thousand miles" (Ibid., 704). Hariot in his A Brief and True Report of the New Found Land of Virginia (1588) spoke of "The maine also of this countrey of Virginia, extending some wayes so many hundreds of leagues" (Quinn, Roanoke, 383). Hariot's valuable Report was reprinted by Hakluyt, Principal Navigations, vol. 8, 348-386, by Quinn, Roanoke, 317-387, and also by the William L. Clements Library of the University of Michigan. The de Bry 1590 edition of Hariot's work was reprinted by Lorant, op. cit., 227-277. Of these, the Quinn reprint is by far the most valuable because it is annotated.
49. Smith, op. cit., 47, 344. This was echoed by Strachey (op. cit., 37). Alexander Whitaker in 1613 modified this by saying that the "extremity of Summer is not so hot as Spaine" (Purchas, op. cit., 113). In making this comparison with Spain, they are talking about the areas in Spain which have the Mediterranean-type climate, and not the mountainous areas of the northern coast. That the summers in Virginia were hot like those of the Mediterranean lands, the settlers could easily understand because of the sameness of latitude, but they also thought that Virginia should have Mediterranean temperatures in winter as well.
50. Compare climatic data for stations in southern Spain with those of tide-water Virginia in Climate and Man: 1941 Yearbook of Agriculture, 677, 1159-1160.
51. Smith, op. cit., 47, 344. Repeated by Strachey, op. cit., 37. Again Whitaker modified this by saying that "the

cold of winter" is not "so sharpe as the frosts of England" (Purchas, op. cit., 113), but this was certainly not the case (see notes 52 and 53 below).

52. Climate and Man, 676, 1159.
53. Smith, op. cit., 47, 344. Strachey: "for 8. or 10. daies of ill weather, we haue Commonly 14. dayes of fayre and sommery weather" (op. cit., 38).
54. R. H. Brown, Historical Geography of the United States (New York: Harcourt, Brace and Company, 1948), 9. Most of the writers recognized differences between the climates of Europe and the New World, but they tended to belittle these differences. Promotional tracts described the climate of every colony from Georgia to New England as the "golden meane," the happy medium between heat and cold (Brown, 7-9).
55. Smith, op. cit., 48, 344; Strachey, op. cit., 38.
56. C. O. Sauer, "The Settlement of the Humid East," Climate and Man, 159.
57. Quinn, Roanoke, 314.
58. Ibid., 383. Actually this list covers quite a range of climates--from Koppen's BWh to Dfb. However, the Far East was very remote from the experience of Elizabethan Englishmen, and this statement means only that the climate of Virginia is roughly identical with that of Eurasian lands of the same latitude, which the English knew as producers of exotic goods.
59. Ibid., 336. Sugar cane might grow on Roanoke Island, as it is grown in northern Louisiana and southern Arkansas in small patches for syrup, but it could not be important there. Similarly the recently introduced orange trees at Buxton are to be considered more as novelties than as an indication that Hatteras Island can support great citrus groves.
60. Strachey, op. cit., 34 (marginal note).
61. Ibid., 38. The potatoes were probably sweet potatoes (Ipomoea batatas). A. S. Aiton ("The Impact of the Flora and Fauna of the New World upon the Old World during the Sixteenth Century," Biologia, vol. 2 (1950/51) (Chronica Botanica, vol. 12, no. 4/6), 122) states that these were Irish or white potatoes (Solanum tuberosum). This merits further study. The white potato, of Andean origin, may not have come to North America until 1719, when it was brought to New Hampshire by Scotch-Irish immigrants (W. E. Safford, "The Potato of Romance and of Reality," Journal of Heredity, vol. 16, no. 4 (June, 1925), 233). A persistent story has S. tuberosum as a native of Roanoke Island, from whence it was introduced to the British Isles as a result

of the Lane expedition. This is repeated in many places: R. D. W. Connor, History of North Carolina, I, The Colonial and Revolutionary Periods, 1584-1783 (Chicago: Lewis Publishing Company, 1919), 13; Works Projects Administration, Writers' Program, North Carolina: A Guide to the Old North State (Chapel Hill: University of North Carolina Press, 1939), 26, 32; D. L. Rights, The American Indian in North Carolina (Durham: Duke University Press, 1947), 21; etc. This legend is thoroughly reviewed by Safford and also by R. N. Salaman, The History and Social Influence of the Potato (Cambridge: University Press, 1949), 51, 77-78, 82-83, and 142-158. A. L. Rowse, otherwise a competent historian, misread Salaman and then wrote, "The date and channel by which the potato was introduced have been much disputed. But it looks as if it was probably brought home by Harriot, on board Drake's ship, from the sojourn of the first Virginia colony upon Roanoke" (Rowse, op. cit., 233), and cited Salaman in a footnote! The fact remains that neither Solanum tuberosum nor Ipomoea batatas was a native of North America and could not have been present on Roanoke Island in 1585. This confusion probably grew out of Harriot's report of native roots in Virginia at the same time that the white potato was being introduced into England from another source. For a discussion of these native roots, many of which went under the collective name of Tuckahoe, see Quinn, Roanoke, 346-350; L. Carrier, The Beginnings of Agriculture in America (New York: McGraw-Hill Book Company, Inc., 1923), 32-33; Strachey, op. cit., 122; John Smith, op. cit., 58, 354; R. Beverley, The History and Present State of Virginia, ed. by L. B. Wright (Chapel Hill: University of North Carolina Press, 1947), 181; A. F. Chamberlain, "Tuckahoe," Handbook of American Indians, part 2, 831-832; and J. H. Gore, "Tuckahoe, or Indian Bread," Annual Report of the Smithsonian for the Year 1881, 687-701.

62. P. A. Bruce, Economic History of Virginia in the Seventeenth Century, vol. 1 (New York: The Macmillan Company, 1907), 251, and L. C. Gray, History of Agriculture in the Southern United States to 1860 (New York: Peter Smith, 1941), 25. Figs, quite tolerant of extra-tropical temperature regimes, have prospered in coastal Virginia and North Carolina. Fig trees are common in the villages on the Outer Banks. The prickly pear (Opuntia, several spp.) was already present on the Outer Banks when white man first arrived. Harriot described it and thought it useful for its fruit and for its supposed use as a host for the cochineal insect (Quinn, Roanoke, 351-352, 352n). Quinn points out that the actual host of the insect which produces cochineal, of which the Spanish had a monopoly, was the Nopal Cactus. Some small olive trees were observed growing on Hatteras Island some 50 years ago, but this is not an area where they could be grown with success or profit (Collier Cobb, "Where the Wind Does the Work,"

National Geographic Magazine, vol. 17, no. 6 (June, 1906), 314-315.

Virginians did not understand that nearby Bermuda was a poor place from which to import plants.

63. There is an oft-repeated legend that tobacco was first introduced into England from Roanoke Island. Connor, op. cit., 13, states: "Everybody knows that the first man of rank to introduce the use of tobacco to the English was Sir Walter Raleigh." N. tabacum was probably introduced to England by Hawkins about 1565 and was growing there by 1570. See Gray, op. cit., 21, and Carrier, op. cit., 55. It was brought to France in 1557 from Brazil. See H. J. Spinden, Tobacco Is American (New York: New York Public Library, 1950), xi-xii. Tobacco was very early introduced into Spain, but the plant was not grown there until 1558. See Alton, op. cit., 122.
64. As tuckahoe (note 61 above). Also there were many items of Indian pharmacopoeia which the whites did not take up. The plant lore of the Indians, who lived entirely off the land, was much more extensive than that of the whites.
65. Sassafras spp. is a small tree, the bark of which was highly prized at that time for its use in the treatment of syphilis, but now regarded as of doubtful efficacy in the treatment of any ailment. See Quinn, Roanoke, 329; Strachey, op. cit., 130; and Quinn, Raleigh, 213 (Strachey, 151). China root (Smilax spp.) was also regarded highly for treatment of the "Greate pockes." See Quinn, Roanoke, 348, and Quinn, Raleigh, 213 (Strachey, 151).
66. England wanted to establish an independent silk industry, but colonial attempts to use the native mulberry failed. Explorers were also constantly on the lookout for plants whose fibers might substitute for silk. Various fiber-producing plants were designated by the name of "silk grass," and it is not always certain which particular plant is meant in a particular account. See Strachey, op. cit., 68n. Generally the term referred to a yucca, especially Yucca filamentosa (bear grass). See Quinn, Roanoke, 325n. Note its occurrence on the marsh islands in Croatan Sound on the 1585 sketch map (Ibid., opp. 215, 217).
67. The desire to establish a wine industry, like the silk delusion, persisted from the earliest days of exploration. There is no indication that the Indians used grapes in any way (Strachey, op. cit., 81). The luscious native grapes were from the first an object of wonder (Quinn, Roanoke, 95).
68. Pellitory is spelled in many ways--pelletory, pillenterry, pilontary, etc. The English were desirous of finding an independent source of Pellitory of Spain (Anacyclus

pyrethrum, the pyrethrum of the ancients), an irritant and salivant used as a toothache remedy, or a substitute for it. See Strachey, op. cit., 123, and Smith, op. cit., 355. There are two American pellitory plants, the pellitory of the northern colonies being Parietaria pennsylvanica and that of the South Xanthoxylum (or Zanthoxylum) Clava-Herculis, which reaches its northern limit in S. E. Virginia and on the Eastern Shore (Tatnall, op. cit., 163). (The name "Pellitory" is a corruption of "Parietaria." In the Old World Parietaria came to be called Pellitory of the Wall to distinguish it from Pellitory of Spain. Xanthoxylum Clava-Herculis received the name pellitory because it could be put to the same use as Anacyclus pyrethrum.) See also R. M. Harper, Economic Botany of Alabama, Part 2 (University, Ala.: Alabama Geological Survey, 1928). 225; A Dictionary of American English on Historical Principles, ed. by W. A. Craigie and J. R. Hulbert, vol. 3 (Chicago: University of Chicago Press, 1942), 1708; A New English Dictionary on Historical Principles, ed. by J. A. H. Murray, vol. 7, part 1 (Oxford: Clarendon Press, 1909), 625-626. Although the reference (above) to "Pellitory" in the Dictionary of American English states that the pellitory in their citations from Lawson and Catesby has not been identified, it is Xanthoxylum Clava-Herculis. This is common on the Outer Banks.

69. England was chary of her remaining timber supply and imported a great deal from the East Baltic lands. See John Smith, op. cit., 360. The explorers saw in Virginia a great future production of ship timber and naval stores. The eastern juniper, Juniperus virginiana, which they named "red cedar" and which they related to the Lebanese cedar, Cedrus libani, was a promising quality wood.
70. Quinn, Roanoke, 337n, puts forth the idea that yaupon was one of the two mystery commodities of which Hariot was withholding the description, but this is, of course, speculation. There is nothing in the literature to indicate its use, even as a trade object, among the Secotan. See W. La Barre, "The Peyote Cult," Doctoral Thesis, Yale, 1937, Appendix N, "The 'Black Drink' and other American Emetic Rites," Map V, "Distribution of the 'Black Drink,'" between pp. ci and cii. More will be said later about the use of yaupon tea by whites.
71. These were already known to the English by 1584. Gray, op. cit., 3, said, "It is probable that there was no significant agricultural product contributed to American agriculture by the natives of Virginia, Maryland, and the Carolinas which had not previously become more or less known to Europeans through the early Spanish, French, and English explorers and the long established Spanish settlements in the West Indies, Mexico, and Florida."
72. Quinn, Roanoke, 246. Smith, op. cit., xxxv-xxxvi, 9, 95, etc.

73. Quinn, Roanoke, 341. See also C. B. Heiser, Jr., "The Sunflower among the North American Indians," Proceedings of the American Philosophical Society, vol. 95, no. 4 (August, 1951), 434-448.
74. Quinn, Roanoke, 342. Strachey, op. cit., 79. Compare with these accounts Edgar Anderson, Plants, Man and Life (Boston: Little, Brown and Company, 1952), 136-142. The whites, with their hide-bound ideas of neatness and regularity of field patterns and of planting different crops in separate rows or fields, could not match these yields. However, the Indians' small holdings and hoe agriculture were only adopted to production for subsistence with not much allowance for surplus or export. The English, who had a difficult time when they had to live off the land, should have borrowed a leaf from the Indians, who had a most efficient work calendar and who observed diet changes in recognition of the seasonal offerings.
75. Mook, op. cit., 89-91. Repeated in Mook's article, "Algonkian Ethnohistory of the Carolina Sound," Journal of the Washington Academy of Science, vol. 34, no. 7 (July 15, 1944), 216-217. The village or villages on Croatoan were something more than temporary, however. They may have been the only permanent Indian settlements on the Banks because of their great distance from the mainland. See Mook's thesis, 91 (217 of article). Geary's interpretation of the name Croatoan, if correct, suggests a very considerable Indian center (Quinn, Roanoke, 866). Mook compiled a very important map of the Indian tribes and towns in northeastern North Carolina. It is found on p. 183 of his article (JWAS, vol. 34, no. 6 (June 15, 1944)). A copy appears as Plate II of this dissertation on p. 25 .
76. Swanton, op. cit., 713.
77. Quinn, Roanoke, 360. Also see the text accompanying White's drawing in the de Bry edition (Ibid., 434-435). Weirs were made of cane (Arundinaria). Apparently the English weirs of that time were not dissimilar. English weirs and weels were made of osiers (willow) (Ibid., 365n). The spears were either pointed by sharpening (Ibid., 360) or by affixing the tail of the king crab (Ibid., 435)
78. Ibid., 433-435. Lorant, op. cit., has reproduced the original drawing on p. 189 and the de Bry engraved copy on 251.
79. There are many good original sources on Indian fishing methods. See citations by Quinn in Roanoke, 365n. For distribution of Algonkian traits, including fishing, from the Secotan to the Micmac, see Flannery, op. cit., For fishing traits see Erhard Rostlund's excellent descriptive and interpretative study, Freshwater Fish and Fishing in

Native North America (Berkeley: University of California Press, 1952). Rostlund's distribution maps of gear types (pp. 291-300) are very interesting.

80. John Smith, op. cit., 95. It was frustrating to see the abundance of fish in the Chesapeake and to be without adequate means of obtaining them. In 1608 Russell and Todkill reported an "abundance of fish lying so thicke with their heads aboue the water, as for want of nets (our barge driving amongst them) we attempted to catch them with a frying pan; but we found it a bad instrument to catch fish with. Neither better fish, more plenty or variety, had any of vs ever seene in any place, swimming in the water, then in the bay of Chesapeack: but there not to be caught with frying pans. . . . But our boate (by reason of the ebbe) changing to ground vpon a many shoules lying in the entrance /mouth of the Rappahannock/, we spied many fishes lurking amongst the weeds on the sands. Our captaine sporting himselfe to catch them by nailing them to the ground with his sword, set vs all a fishing in that manner. By this devise, we tooke more in an houre than we could all eat" (Ibid., 113).
81. J. C. Pearson, "The Fish and Fisheries of Colonial Virginia," William and Mary College Quarterly Historical Magazine, 2nd series, vol. 22, no. 4 (October, 1942), 355. Pearson points out that "the food stock of the Jamestown colony including the fresh fish supply remained precarious at least until 1623 when colonists began to acquire personal articles of fishing equipment."
82. Terminology of stock animals is confusing in some of the old accounts. The term "cattle" referred collectively to oxen, horses, sheep, goats, and pigs. Oxen (Bos) were sometimes referred to as "neat cattle," "horned cattle," or "beeves" to distinguish them from the rest. P. Bruce, op. cit., vol. 1, 251. Actually "black cattle" was also a term for all kine and did not designate color. W. N. Laing, "Cattle in Early Virginia" (Unpublished doctoral thesis, University of Virginia, 1954), 13-14. In this dissertation, the term "cattle" will hereafter refer only to kine.
83. G. Stewart, American Ways of Life (Garden City, N. Y.: Doubleday and Co., 1954), 81-82. Even horses were eaten, which is certainly not a European practice. F. Harrison, "The Equine F. F. Vs," Virginia Magazine of History and Biography, vol. 35, no. 4 (October, 1927), 329. See Stewart, op. cit., 77-78, on hippophagy. As one might expect, the horse population of the infant colony was small because horses are not so useful as cattle.
84. Gray, op. cit., vol. 1, 138. Also, unlike pigs, sheep did not fare well in the forest lands. Sheep were never as important in the South as they were in certain areas of New England. Stewart, op. cit., 80.

85. Use of islands and necks for stock raising was widespread in the colonies throughout the colonial period. In the North, the islands in Boston Harbor and necks adjoining were early used for this purpose. The islands of Narragansett Bay and the Narragansett Country, including Boston Neck, were perhaps most famous for stock raising. Long Island, Block Island, Staten Island, and Coney Island were all used for this purpose. Carrier, op. cit., 156, 188; Brown, op. cit., 31-33; P. W. Bidwell and J. I. Falconer, History of Agriculture in the Northern United States, 1620-1860 (Washington, D. C.: Carnegie Institution, 1925), 22; L. Gillman, "Coney Island," New York History, vol. 36, no. 3 (July, 1955), 257; J. W. Thompson, A History of Livestock Raising in the United States, 1607-1860 (United States Department of Agriculture, Bureau of Agricultural Economics, Agricultural History Series, 5, 1942), 16, 30, 44, 53. In 1631 cattle were raised on Kent Island in the Chesapeake. Bruce, op. cit., vol. 1, 298. In Virginia the islands of the Eastern Shore were early taken up for stock raising. Ames, op. cit., 32-35. J. C. Wise, Ye Kingdome of Accawmacke or the Eastern Shore of Virginia in the Seventeenth Century (Richmond: The Bell Book and Stationery Co., 1911), 309-311.
86. Bidwell and Falconer, op. cit., 19-20; Thompson, op. cit., 18; Carrier, op. cit., 26; Sauer, op. cit., 159-160; Brown, op. cit., 30.
87. W. N. Sainsbury, "Virginia in 1626-1627," Virginia Magazine of History and Biography, vol. 16, no. 1 (July, 1908), 37n. The name "Roanoke" was then applied to the whole Albemarle Sound, then called Roanoke River, area.
88. CR, vol. 1, p. 5.
89. CR, vol. 1, 17.
90. CR, vol. 1, 676.
91. Peter Force, Tracts and Other Papers, vol. 3, no. 11 (Washington: William Q. Force, 1844), 8. "But the South of Virginia having a contiguous Ledge of at least one hundred Islands, and in the midst of those the incomparable Roanoak, the most of them at the same distance from the Continent that the Ile of Wight is from Hampshire, all of hazardous accesse to Forrainers, and affording a secure convenience from surprizall by the Natives, will if possessed and protected by your power, be as an inoffensive Nursery to receive an infant Colony, till by an occasion of strength and number, we may poure our selves from thence upon the Mayneland, as our Ancestors the Saxons from the Isle of Tanet into Brittaine."
92. A. S. Salley, ed., Narratives of Early Carolina, 1650-1708 (New York: Scribners, 1911), 6-7. H. T. Lefler, ed., North Carolina History Told by Contemporaries, 2nd ed. (Chapel Hill: University of North Carolina Press, 1948), 12.

93. CR, vol. 1, 17.
94. CR, vol. 1, 18-19. Reprinted by Salley, op. cit., 23-29, and Lefler, op. cit., 13-14.
95. W. P. Cumming, "The Earliest Permanent Settlement in Carolina. Nathaniel Batts and the Comberford Map," American Historical Review, vol. 45, no. 1 (October, 1939), 82-89.
96. CR, vol. 1, 20-33. As noted above in note 35, the name "Carolina" did not come into being until 1663. Some of the proprietors' names were also then used in place names: Hyde (County); Monck, Duke of Albemarle (County and Sound); Craven (County); and Colleton (Colington Island). Of special importance to the history of the Banks was the separate grant on September 8, 1663, of "Carlyle Island now Colleton Island" to Sir John Colleton. CR, vol. 1, 55.
97. CR, vol. 1, 102-114.

CHAPTER III
PERMANENT SETTLEMENT OF THE BANKS:
THE COLONIAL PERIOD

It is not known exactly when the stock raisers first began to take up land on the Banks, but doubtless this occurred only shortly after the north shores of Albemarle Sound began to be settled. That cattle were early placed on Colington Island is shown by two items from the records of the Albemarle General Court: one is a request to restrain a certain individual from killing cattle on Colington in 1694, and the other is an announcement of sale of cattle there in 1698.¹ Stock on Roanoke Island are mentioned in a 1701 petition.² About 1710 one Farnefould Green petitioned to settle stock near Ocracoke Inlet. Green stated that he was a man of good character, a necessary requirement for settling on the Banks at that time because it was desired that no harm should come to the sailors or cargoes which were cast away there.³ By 1733 the whole island of Ocracoke was owned by Richard Sanderson of Perquimans County, who in that year bequeathed to his son Richard "Ye Island of Ocreecock, with all the stock of horses, sheep, cattle and hoggs."⁴

Other early mentions of stock on the Banks were William Byrd's reference to cattle on the island between Old and New Currituck inlets in 1728⁵ and a will dated 1752

bequeathing "sword [sward] and cattle at Kettyhawk."⁶ In 1776 it was said that "all the sea banks [are] covered with cattle, sheep and hogs, and the few inhabitants living on the banks are chiefly persons whose estates consist in live stock."⁷ Another indicator of the widespread use of the Banks for stock raising is the great incidence of names of stock animals among the place names of the area.⁸

The land grants on the Banks during the colonial period were often very large, necessarily so for the purpose of stock raising, and a thorough study of the grants and deeds would be very rewarding in this matter of the early use of the Banks,⁹ but it should be remembered that the ownership represented by grants and deeds did not always mean control or occupation of the land. Presumably many of the early settlers acquired their property merely by settling on it.¹⁰

Not in all cases were the stock accompanied by herders,¹¹ and some of the first settlers may not have been much concerned with stock raising. Perhaps the first dwelling on the Banks is the one shown on Colington Island on Lancaster's 1679 map of the Albemarle area.¹² It is not clear in every case why people were motivated to settle on the Banks. Colonial North Carolina had a reputation as the refuge of Virginia's criminals and runaway slaves,¹³ and since the Banks were among the most isolated parts of the colony, they could have attracted a few fugitives,¹⁴ but it is highly unlikely that this could account for more than a very small percentage of the early population. Popular belief has it that the majority of the Bankers are descendants of shipwrecked sailors. While it is possible that

occasional shipwrecked seamen remained there, the main family names are traceable to Maryland and Virginia.¹⁵ The overwhelming majority of these first arrivals were poor but respectable yeomen who saw an opportunity to acquire, generally for the taking, land for a homestead and garden and to raise a few head of stock on the unrestricted range. The small amount of cultivable land precluded their being full-time farmers, and they early took to supplementing their garden agriculture with fishing and waterfowl hunting. Little but stock was exported in these early days.

The Indian inhabitants of the Banks at the time of first settlement by whites were few in number, and most of them soon left for the mainland. The Hatteras Indians, first described by Lawson,¹⁶ resided at the Cape, and in 1715 some Poteskeets were hunting on the Banks,¹⁷ probably in the Kitty Hawk-Duck area. The Hatteras Indians, about eighty in number,¹⁸ lived in a town on the sound side at present Buxton. The town was unnamed and was referred to in contemporary deeds and on maps merely as "Indian Town" or "Cape Hatteras Indian Town."¹⁹ Lawson's map of 1709 was the first to show this town,²⁰ and it may not have been in existence very long as a strictly Indian settlement, despite its occurrence on maps as late as 1765.²¹ In 1715 the Hatteras Indians were described as being in great poverty, and they were granted sixteen bushels of corn by the North Carolina Council.²² On the Moseley map of 1733 it says that there are "6 or 8 Indiang" at Hatteras, who dwell among the English."²³ In 1761 and 1763 the Rev. Alexander Stewart reported to the Secretary of the Society

for the Propagation of the Gospel (S.P.G.) that "the few remains of the Altamuskeet, Hatteras & Roanoke Indians" lived on the mainland in Hyde County.²⁴ Thus it is seen that the Indians were not an important population element on the Banks in colonial days and that those few who remained or later returned were so thoroughly absorbed that no further mention was made of them.²⁵

The first homesites on the Outer Banks were all, as they are today, in the "hammocks"²⁶ on the sound side. In all probability, the most common house type of the Banks in the colonial era was the one-and-one-half- or two-story, one-room-deep house with outside end chimneys and a central hallway, with a rear appendage, perhaps detached, because this was the most common type in Virginia and North Carolina in the 17th and 18th centuries and represents the majority of the older Banks houses to this day.²⁷ One can imagine that the gardens were of fairly large size and produced a variety of vegetables because of the homesteads' isolation. The size of the gardens is in inverse proportion to the improvement of communications. The yards and gardens were enclosed by fences to protect them from the roving stock.²⁸ Apparently surprisingly few elements of the homestead complex have changed importantly from the time of the first settling of the Banks.

Fishing was almost entirely for home consumption, although there may have been a little salting for trade,²⁹ and was conducted almost entirely in the sound waters. The gear was meager and simple,³⁰ and the boats used were rowboats, canoes, and perriaugers.³¹

Lawson noted that "a few People who live on the Sand-Banks" work on dead whales "cast on shoar," but whales were not the object of a boat fishery there.³² Lawson said that the trying of dead whales was fairly important to "those that inhabit the Banks and Sea-Side, where they dwell for that Intent, and for the Benefit of Wrecks which sometimes fall in upon that Shoar."³³

The popular belief is that many of the early Bankers supported themselves by "wrecking," that is, by taking goods from wrecked ships and by using wreck timber. Apparently, before the days of wreck commissioners and vendues, the Bankers sometimes availed themselves of the timbers and cargoes of wrecked ships but only when they went unclaimed.³⁴

There are only a few recorded cases of Bankers robbing a wrecked ship. Edward Randolph in 1700 reported that about 1696 when "his Majestys ship the Hady was drove a shore upon the sands between the Inletts of Roanoke and Currituck, the Inhabitants robed her and got some of her guns ashore and shot into her sides and disabled her from getting off."³⁵ In 1750 the Bankers plundered Spanish ships which had sought refuge in Ocracoke Inlet during a storm but only because of Spanish depredations on that coast a few years previously.³⁶ In 1777, during the Revolution, the master of a vessel "lately stranded and lost at Ocracock Bar" said that "he has been defrauded of greatest part of the Cargo of said Vessel by some of the inhabitants at or near Ocracock."³⁷ In 1778 part of the goods saved from a French ship wrecked near Roanoke Inlet were "embezzled."³⁸ The nature of these cases and their

rarity demonstrate that the early Bankers were undeserving of their reputation as wreckers or land pirates.³⁹

Increasing maritime commerce in colonial days was reflected by the increase in wrecked ships on the Outer Banks, and North Carolinians were constantly reminded of the tremendous commercial disadvantages of this treacherous coast with its dangerous shoals and shallow, uncertain inlets.⁴⁰ The inlets used by colonial commerce were Ocracoke, Currituck (Old and New), and occasionally Roanoke. Hatteras Inlet, apparently never very useful for navigation, may have begun to close about 1738⁴¹ and was probably completely closed about 1755.⁴² Byrd observed in 1728 that the opening of New Currituck in 1713 was hastening the demise of Old Currituck Inlet,⁴³ and in 1731 the latter was reported closed.⁴⁴ Roanoke Inlet, at the eastern end of Albemarle Sound, was ideally located for the trade of the Albemarle, but its shallowness precluded its use by any ships other than those of "small burden."⁴⁵ Ocracoke Inlet was always the deepest and was the most used in the 18th century, but dangers and delays were also noted in its use.⁴⁶

It was early deemed necessary that navigation through the inlets be improved. Lawson spoke of the practice of "lightering" at Currituck Inlet, that is, of transferring all or parts of cargoes to shallow-draft boats within the inlet.⁴⁷ Lightering was later practiced at other inlets, notably Ocracoke.⁴⁸ There were acts and proposals for establishing beacons and channel markers in Roanoke and Ocracoke inlets beginning in 1715.⁴⁹ In 1715 there was "An Act for Settling

and Maintaining Pilotts at Roanoke and Ocacock Inletts,"⁵⁰ and in that year a pilot was established at Roanoke Inlet,⁵¹ but at Ocracoke Inlet a pilot may not have been established until 1734.⁵² In 1726 money was to be appropriated for beacons, channel markers, and pilots at Currituck Inlet.⁵³

Some writers rationalized that these hindrances to navigation were actually a blessing in time of war. Lawson said, "the Difficulty of that Sound to Strangers, hinders them from attempting any Hostilities against us; and at the same time, if we consider the Advantages thereof, nothing can appear to be a better Situation, than to be fronted with such a Bulwark, which secures us from our Enemies."⁵⁴ However this may have protected North Carolina's ports, such as Edenton and New Bern, in wartime, the Banks--the Bulwark itself--were occasionally visited by the enemy. In 1741-1742 and again in 1747-1748 Spanish privateers cruised along the coast, took several ships, particularly at Ocracoke Inlet, and killed cattle and hogs on Ocracoke Island.⁵⁵ Privateers also took vessels on this coast during the Seven Years War.⁵⁶

The Americans found this coastal physical situation advantageous in the Revolution, because the British navy discovered it was virtually impossible to maintain a siege on this dangerous coast, far from bases of supply.⁵⁷ As it was observed in 1776 that "all the sea banks [are]⁵⁸ covered with cattle, sheep and hogs," the Americans were interested in protection or removal of this stock, for they reasoned that "if the armed vessels and tenders are prevented from getting supplies of fresh provisions from this sea coast, it will be impossible for the war to be of long continuance in this

Province."⁵⁹ In 1777 Capt. John Nelson of the Craven Militia was instructed to take his group to Core Banks, "there to repel, or do your best to repel, the enemy at or near that place, and by all means to remove the Stocks of Cattle & Sheep so as at every event to prevent their falling into the enemies hands."⁶⁰ In 1778 a British privateer killed several cattle near Currituck Inlet,⁶¹ and in the following year there is record of a repulse by Bankers of an attempt by some English seamen to land and take cattle just north of Cape Hatteras.⁶²

At all times during the Revolution the inhabitants of the Banks were apprehensive of attack.⁶³ For this reason, even though the Banks men were willing to serve in the local militia, they were exempt from expeditions away from home.⁶⁴ During the war, the British took many ships at or near the inlets and even made occasional forays into the sounds, but the Banks posed a very effective barrier to invasion or to sustained attack.⁶⁵ Particularly vital to the American cause was Ocracoke Inlet, which served as an important link in the state's supply line. Former colonial governor Josiah Martin reported to Lord George Germaine on January 23, 1778, that "the contemptible Port of Ocracock . . . has become a great channel of supply to the Rebels while the more considerable Ports of the Continent have been watched by the King's Ships."⁶⁶

In the early colonial period North Carolina achieved notoriety for the harboring of pirates. Edward Randolph in 1696 and 1700 noted that "tis a place which receives Pirates."⁶⁷ North Carolina's maritime commerce was not as great as Virginia's and South Carolina's, and she was not so hostile to pirates

as were her neighbors.⁶⁸ Moreover, in North Carolina there is evidence that pirates were aided by the colony's officials.⁶⁹ The as-yet-unsettled Cape Fear area, close to a source of plunder at Charleston, was regarded by the pirates as an excellent base.⁷⁰ In fact, pirates came to prefer the North Carolina coast to their old base at New Providence. North Carolina afforded excellent careening places on the Cape Fear and Pamlico rivers and a ready market at Bath. On New Providence they could sell only to middlemen, who in turn had to smuggle the goods into the American colonies, but in North Carolina they could sell directly to consumers, and the profits were higher even after the colonial officials took a share.⁷¹

In 1717 the notorious "Blackbeard," Edward Teach (or Thatch), became active off the Carolinas. Teach, who may not have been a pirate before 1716, ranged widely during his brief career of piracy and seemed not to have a favorite base.⁷² In November, 1718, Teach was at Ocracoke, where, according to a report, he was preparing to fortify the shore and make the place into "another Madagascar."⁷³ It was here that he was caught and killed on November 22, 1718, by an expedition under Lt. Maynard sent out by Gov. Spotswood of Virginia, who desired "to put a Stop to ye further Progress of the Robberys."⁷⁴ The death of Teach brought an abrupt end to the use of North Carolina bases by pirates, and this was also virtually the end of piracy in America.⁷⁵

The nature of the coastal area invited smuggling throughout the colonial period. Masters of vessels soon realized the ease of breaking cargo at the inlets and of loading goods onto

small boats to be taken to any one of the numerous small settlements or landings, thereby avoiding payment of customs at one of the ports. The Collections, or ports where customs duties were paid, were at Bath, Port Roanoke (Edenton), and Currituck.⁷⁶ The Currituck Collection apparently was shifted from place to place, and its management was never satisfactory.⁷⁷

The trade of the Albemarle was mostly in the hands of New Englanders, who would bring their sloops in through Roanoke and Currituck inlets, particularly the latter, and remove goods without payment of duties.⁷⁸ There were cases, too, of illegal transactions at Ocracoke Inlet.⁷⁹

There were early attempts to strengthen the collection of customs. Since no towns existed in 17th century North Carolina, it was decided that some should be established in order to concentrate and facilitate collections. In 1676 the Proprietors instructed the Albemarle Government that "three Townes [are] to be settled which shall bee the porte Towns of your County of Albemarle which places are the first Roanoke Island which wee would have the Cheife towne and the place where the Councell assemble should meete . . .,"⁸⁰ but nothing came of it. In 1723 interest was renewed in establishing a town, to be named Carteret, on Roanoke Island, but this plan, too, failed of fruition.⁸¹

As early as 1731 Governor Burrington began to agitate for the establishment of a port and customs house at Ocracoke.⁸² His request was repeated in 1732, 1733, and 1736.⁸³ Apparently a few persons, mostly pilots, began to settle at Ocracoke in the 1730's.⁸⁴ In 1750 there were enough inhabitants at

Ocracoke to form a "Villanious [^{-sic}] Confederacy," plunder two Spanish ships, and intimidate a third.⁸⁵

After the Spanish depredations on the coast in King George's War,⁸⁶ it was decided to establish a fort, to be named Fort Granville, and a town, to be called Portsmouth, on the south side of Ocracoke Inlet. Portsmouth was established by act of legislature in 1753, and half-acre lots were sold in the town starting in 1756, but the town always remained small and never achieved any importance as a port.⁸⁷ The fort, begun in 1755-1756, may never have been completed.⁸⁸

Thus, at the end of the colonial period, there were only two settlements of any size on the Outer Banks--Ocracoke and Portsmouth--on the north and south sides of the most important inlet.⁸⁹ Portsmouth was the larger of the two and was more varied in function.⁹⁰ The village of Ocracoke was made up largely of pilots and their families.⁹¹ Although unnamed on maps, there existed small settlements in all the places on Hatteras Island where there are villages today,⁹² on the wooded sound shore north of Roanoke Inlet, and on Roanoke and Colington islands.⁹³ In short, the settlement sites on the Banks in colonial days were the same as those of the present. They were all in wooded tracts--hammocks--on the sound side. There is no evidence to believe that the colonials had a much wider choice of site than they would today; that is to say, the forest cover of the Banks has not changed importantly since the days of first settlement.⁹⁴

NOTES

1. North Carolina Historical and Genealogical Register, vol. 3 (1903), 68, 72. Hereafter cited as NCHGR.
2. Ibid., 152.
3. Ibid., 67-68.
4. D. Padgett, comp., The Howard Family of Ocracoke Island, N. C. (Washington, D. C.: Mimeographed by the compiler, 1955), 1-2; J. B. Grimes, Abstracts of North Carolina Wills (Raleigh: E. M. Uzzell & Co., 1910), 326; A. K. Rondthaler, "The Story of Ocracoke," The State, vol. 7 (August 19, 1939), 7; A. K. Rondthaler, The Story of Ocracoke (Ocracoke: The Channel Press, 1949), 3.
5. W. Byrd, Histories of the Dividing Line betwixt Virginia and North Carolina, ed. by W. K. Boyd (Raleigh: North Carolina Historical Commission, 1929), 46.
6. Grimes, op. cit., 33. The name "Kitty Hawk" is an interesting one. Undoubtedly Algonkian, the form was said to be originally "Chickahauk" (which appears on the 1738 Wimble map), but there are also early occurrences of the name as "Keeterhock" (W. B. Marye's notes, N. C. Land Patent Records, Liber 3, 1720-1738, folio 114) and "Kitty Hawk" (Grimes, op. cit., 114). That early spelling as "Kitty Hawk" was in a 1740 will and may have been inadvertently modernized in publication. Possibly the name Kitty Hawk is descended from "Etacrewac," the name which appears on the White maps and which Geary translates as "evergreen-ground" (Quinn, Roanoke, 863).
7. CR, vol. 10, 526-527.
8. Only occasionally are the old maps of sufficiently large scale to show much detail in the nomenclature, but it is thought that the majority of these names have a reasonable antiquity. It cannot always be known whether a particular place name arose from the presence of stock animals there. For example, the name "Nags Head" may or may not have originated from the grazing of horses in that area.
There are many colorful stories concerning the origin of the name "Nags Head," the most common being that it reflects an old wreckers' practice of luring ships ashore by leading a horse up and down the beach with a lantern tied around its neck, thereby deluding mariners into

thinking that it was the lantern of a ship riding in safe waters. Taking for the moment the doubtful position that there were ever any wreckers or land pirates on this coast, the above explanation of the name is too far-fetched to be considered. The name first appears on the 1738 Wimble map, and on that map it refers to a large dune just north of Roanoke Inlet. Hence it must have received this name because it was a head or headland, a conspicuous landmark, near the inlet. The name might well be a direct borrowing from a place of that name in England. Bartholomew's Gazetteer lists three Nags Head place names in England, and the name is also occasionally encountered as the name of a country inn there (Letter to Dr. F. B. Kniffen from Dr. H. C. Darby, Department of Geography, University College, London, March 29, 1955). One of the occurrences is the name of a promontory at St. Agnes in the Scilly Islands, which suggests that "Nags" may be a corruption of St. Agnes.

9. Some land grants and deeds were examined in the State Department of Archives and History, Raleigh. A more thorough study should be made of them. The writer also used information on land grants and deeds from the notes of David Stick and William B. Marye.
10. One good example of a place where the taking up of the land went on without recognition of the ownership was Roanoke Island. The complicated history of the colonial ownership of the island can be found in several documents and publications: The Hayes Collection (microfilm), Folders 1, 6, and 7, Southern Historical Collection, University of North Carolina; Belcher Noyes Paper, North Carolina State Department of Archives and History; "The Ownership of Roanoke Island in 1669," NCHGR, vol. 2 (1901), 101-108; and "Roanoke Island," Historical Magazine, April, 1862, 122-123. Disputes over the ownership of the island in the 18th century resulted in at least three maps of the island: 1718 by William Maule, 1729 by Edward Moseley, and one done by John Clayton about 1761. Maule's MS map and a photostat copy of Moseley's are in the State Department of Archives and History. Moseley's original is in the possession of John Gilliam Wood of Edenton, N. C. Clayton's map is Document 6 of Folder 6 on the microfilm of the Hayes Collection. Mr. Wood also has the originals of the Hayes Collection.
11. The fact that the stock sometimes preceded the first settlers has given rise to various legends concerning the origin of the stock, particularly of the Ocracoke horses or "ponies." It has been said that these ponies are descendents of horses brought to Florida by Ponce de Leon, or that they are descended from Barbary horses brought by Raleigh's men, or that they are survivors of shipwrecks, or that they were brought there by pirates. For examples of these legends, see such works as R. B. Creecy, Grandfather's Tales of North Carolina History (Raleigh: Edwards and

Broughton, 1901), 171, and F. A. Olds, "The North Carolina Wild Ponies," The Uplift, vol. 19, no. 40 (October 3, 1931), 10. The same legends are told about the horses of Chincoteague. See W. B. Marye, "The Sea Coast of Maryland," Maryland Historical Magazine, vol. 40, no. 2 (June, 1945), 98, and Wise, op. cit., 307-310. The real explanation is that the horses and other stock were purposely placed on the islands by stock raisers in colonial days. As Wise said (p. 310), "Why look to shipwrecks and pirates?" Why, indeed, except that in every case the romantic explanation is always the more popular.

These "ponies" were actually horses stunted by lack of controlled breeding. For examples of reduction of size of horses allowed to run free see P. Bruce, op. cit., vol. 1, 473, and Harrison, op. cit., 332. About 1754 it was observed that these banks ponies were bought by mainlanders for use in teaching children to ride (Thompson, op. cit., 64). Other names for these horses were "beach horses," "marsh ponies," and "tackies."

12. James Lancaster. Map (no title). 1679. Blathwayt Atlas, No. 21. MS map in Blathwayt Collection in John Carter Brown Library, Brown University. Photostat copy in Library of Congress.
13. Virginians sometimes referred to North Carolina as "Rogue's Harbor." F. L. Hawks, History of North Carolina, vol. 2 (Fayetteville, N. C.: E. J. Hale & Son, 1858), 148. Edward Randolph on Nov. 10, 1696, reported: "Pyrats & runaway Servants resort to this place from Virginia" (CR, vol. 1, 467), and on March 24, 1700, he stated that "tis a place which receives Pirates, Runaways, and Illegal Traders" (Ibid., 527). In 1681 Governor Culpepper of Virginia wrote the Lords of Trade, "North Carolina is and always was the sink of America, the refuge of our renegades" (Gray, op. cit., 44). "After Bacon's Rebellion" runaways, rugges, and rebels . . . fled daily to Carolina, as their common subterfuge and lurking-place . . . Almost all the American colonies were chiefly planted by men to whom the uniformities of European life were intolerable; North Carolina was planted by men to whom the restraints of other colonies were too severe" (George Bancroft, History of the United States of America, vol. 1 (New York: D. Appleton and Co., 1888), 424, 428). Doubtless many of Virginia's undesirables drifted into Carolina, but as a frontier area North Carolina could be expected to represent all types. The movement of criminals, heretics, dreamers, adventurers, and, most important, of repressed small farmers is always out of the longer-settled areas and into the frontier zones.
14. CR, vol. 1, 514, mentions that in 1699 a person named Grand on the "Sand-banks" had entertained some persons suspected to be runaways. This is the only mention that could be found of fugitives definitely going to the Banks.

15. D. A. Padgett, "Eastern North Carolina as a Field for Genealogical Research," National Genealogical Society Quarterly, vol. 33, no. 4 (December, 1945), 103. Most popular articles state categorically that the Banks are inhabited by shipwrecked sailors and their descendents: e. g., M. Davis, "Primitives of the Carolina Banks," South Atlantic Quarterly, vol. 32, no. 2 (April, 1933), 116; B. L. Burman, "On the Perilous Beaches of Hatteras," Reader's Digest, vol. 67, no. 402 (October, 1955), 122; H. Sutton, "Man on a Dune," Saturday Review, vol. 38, no. 29 (July 16, 1955), 45; etc. Many articles of this type term the Bankers' speech "Elizabethan." Burman even stated that "the Hatteras speech is a strange mixture of Cockney and North-of-England and Southern drawl"! It is true, of course, that the Bankers' speech has preserved a few archaisms and strikes the stranger as being "quaint" or "Elizabethan," but the historical evolution of this coastal speech community can be fairly well outlined, and the archaic usages are noted in other rather isolated areas, the mountains of western North Carolina, for example. See H. Kurath, A Word Geography of the Eastern United States (Ann Arbor: University of Michigan Press, 1949), 47, and G. P. Wilson, "Folk Speech," 503-618 in vol. 1 of The Frank C. Brown Collection of North Carolina Folklore, ed. by N. I. White (Durham: Duke University Press, 1952). See Collier Cobb, "Early English Survivals on Hatteras Island," University of North Carolina Magazine, n. s. vol. 27, no. 3 (February, 1910), 3-10, for some speech archaisms on the Banks. Many of Cobb's interpretations are of doubtful validity.

There have been attempts to ascribe an origin other than English to some of the Banks family names. Examples are Midgette (or Midgett), said to be Italian; Odeon, Oden, or Odin (variants of Odom), French or Danish; Baros (Barrus), Man (Mann), Blackman, and Adomes (Adams), all Greek; and Wahab (a variant of Waughop, Wauchope, and Walkup), Arab! See Collier Cobb, such as "Greek, Roman, and Arabian Survivals on the North Carolina Coast - A Preliminary Sketch," North Carolina Booklet, vol. 15, no. 4 (April, 1916), 218-228. The popular literature is fraught with this sort of thing, always trying to show that the Bankers are a heterogeneous lot, descended from shipwrecked sailors and definitely unlike the inhabitants of adjacent coastal areas, but the same evidence which the popular writers use--place names, family names, folklore, and speech--clearly indicates an almost solidly English background, deriving immediately from south-eastern Virginia.

16. Lawson first arrived in North Carolina in 1701, and his book was published in 1709. Lawson, op. cit., xii. It is not known when, in those intervening eight years, his observations concerning the Banks were made.
17. The Poteskeet Center was on North River. See Lawson, op. cit., 255, and Mook's map, Plate II of this thesis.

"Upon Petition of the Porteskyte Indyans showing that the Inhabitants of Corratuck Banks have & doe hinder y^e Said Indyans from hunting there and threaten them to breake their guns and that they Cannot subsist without the liberty of hunting on those their usuall grounds.

"Whereupon it is hereby ordered that y^e said Indyans from henceforward have Liberty to hunt on any of the said Banks land that noe Englishman presume to disturbe them thereon without application made to this Board" (CR, vol. 2, 172).

18. This figure was obtained, possibly first by Mooney, by estimation from Lawson's figure of sixteen as the number of fighting men. Lawson, op. cit., 255. J. Mooney, "Hatteras," Handbook of American Indians, part 1, 1907, 537.
19. Marye, op. cit., 98n, records a 1712 land grant which mentions "Cape Hatteras Indian town." Many writers have said that the name of the town was "Sand Banks." See Mooney, "Hatteras," 537; F. A. Olds, "Our North Carolina Indians," North Carolina Booklet, vol. 17, no. 1, (July, 1917), 42; Rights, op. cit., 32; and J. R. Swanton, The Indian Tribes of North America, Smithsonian Institution, Bureau of American Ethnology, Bulletin 145 (Washington: GPO, 1952), 80. This came from a misinterpretation of Lawson, op. cit., 255, who compiled a list of North Carolina Indian tribes with towns, locations, and population. In this list were the Hatteras Indians: ". . . Hatteras Town 1; Sand Banks, Fighting Men, 16 . . ." "Sand Banks" was not the name of the town but its location.
20. "(Map) To His Excellency William Lord Craven Palatine . . . This Map . . ." by John Lawson and drawn by John Senex, 1709. This shows "Ind. Towne" at the Cape. Lawson's map, drawn to accompany his book, was copied from Thomas Nairne's "A New Chart of the Coast of Carolina," 1708. For references to Nairne and his map, see V. W. Crane, The Southern Frontier, 1670-1732 (Durham: Duke University Press, 1928). Nairne's map does not show the Indian town at the Cape, however.
21. See J. Gibson's "A New & Correct Map of the Provinces of North & South Carolina, Georgia, & Florida," 1762, a copy of which is in the Duke University map collection, and T. Kitchin's "A Map of North & South Carolina & Georgia," 1765, copy in the Map Division of the Library of Congress.
22. CR, vol. 2, 171.
23. Edward Moseley, "A New and Correct Map of the Province of North Carolina," 1733. The only copy of the Moseley map in this country and the only one in good condition is in the private collection of Mr. Henry P. Kendall of Camden, S. C. (Letter to writer from Dr. W. P. Cumming, Davidson College, March 11, 1956). Dr. Cumming has a full-size

photocopy of the Kendall map. In 1822 a copy of Moseley's map was made by the Topographical Office of the Engineer's Department, but this is not a very faithful reproduction of the original. This 1822 copy can be found in the Cartographic Records Branch of the National Archives in Record Group 77 as "Flat H-47."

24. CR. vol. 6, 563, 995. For a good compilation of all references to Algonkians in eastern North Carolina, including those on the Banks, see Mook's thesis, 101-111 (221-225 of his article).

25. Speck in 1916 reported that "on Roanoke Island and on some of the adjacent sand islands and on the mainland of Dare and Hyde counties on the coast of North Carolina are a few families of mixed-blood, descendants of the local Indian tribes . . . In appearance they vary greatly, from individuals with pronounced Indian characteristics, through people with noticeable white or Negro features, the latter sort predominating in the younger generations. Not one of these people knew a single word of the Indian language and not one knew of any definite Indian customs or traditions, not even the name of their tribe." F. G. Speck, "Remnants of the Machapunga Indians of North Carolina," American Anthropologist, n. s. vol. 18, no. 2 (April-June, 1916), 271-272. In a 1924 paper Speck said that "the Machapunga are represented by about 100 survivors on Roanoke Island." Speck, "The Ethnic Position of the Southeastern Algonkian," 188n.

26. The generalization that all modern settlements are on the sound side does not, of course, include the modern beach cottages in the Nags Head - Kitty Hawk Area.
 A hammock is simply a wooded tract, generally, although not always perceptibly, slightly higher than the surrounding area. The term "hammock" is a variant of "hummock." See McJimsey, op cit., 77-78; E. W. McMullen, Jr., English Topographic Terms in Florida, 1563-1874 (Gainesville: University of Florida Press, 1953), 122-125, 131-132; Mathews, op. cit., vol. 1, 770; Craigie and Hulbert, op. cit., vol. 2, 1212; Murray, op. cit., vol. 5, 451; and G. B. Goode et al. The Fisheries and Fishery Industries of the United States, II, A Geographical Review of the Fisheries Industries and Fisheries Communities for the Year 1880 (Washington: GPO, 1887), 483.
 Because of the variety of uses to which the term is now put in Florida and Georgia, Roland M. Harper has said that "hammock" is not related to "hummock" and that it may be related to "hammock," the suspended mat. He apparently did not know of the latter's Carib origin (both mat and name) and even implied its relation to the German "Hangematte." However, had he seen Murray's reference to "hammock," the topographical term, he would have understood its relation to "hummock" and its historical evolution. See Harper's publications: "'Hammock,' 'Hommock' or 'Hummock'?",

Science, n. s. vol. 22, no. 561 (September 29, 1905), 400-402; "Preliminary Report on the Peat Deposits of Florida," Florida State Geological Survey, Third Annual Report, 1909-1910, 1910, 217; and Economic Botany of Alabama, Part 1, Geographical Report on Forests, Geological Survey of Alabama, Monograph 8, 1913, 83n.

A low or wet hammock might be a "quaking hammock" or "quake hammock." In all probability this is the origin of the name "Quork Hammock" on Ocracoke Island. See Green Island topographic sheet, AMS 1/25,000. This place name, as well as "Quokes Point" on the adjoining Howard Reef sheet, have been explained by a fantastically contrived legend about a man named Quork ("Old Quork"). See M. Davis, op. cit., 117, and Stith Thompson, ed., "Folk Tales and Legends," 641 in vol. 1 of White, op. cit. Spelling differs on different maps. "Quarks" is another form. C. A. Weslager apparently transcribed the name phonetically as "Kwawk" and said that "Kwawk Hammock" and "Kwawk Point" are the breeding places of the black-crowned night heron, "kwawk" referring to the bird's shrill cry ("Place Names on Ocracoke Island," NCHR, vol. 31, no. 1 (January, 1954), 47). However, an 1885 reference gives the name as "Quake Hammock." W. L. Welch, "Opening of Hatteras Inlet," Bulletin of the Essex Institute, vol. 17, nos. 1-3 (January-March, 1885), 41. This was undoubtedly its original form, and Old Quork is then a rather recent invention.

27. P. Bruce, op. cit., vol. 2, 151, 161. T. J. Wertenbaker, The First Americans, 1607-1690 (New York: The Macmillan Co., 1927), 286-287. J. C. Spruill, "Virginia and North Carolina Homes before the Revolution," NCHR, vol. 12, no. 4 (October, 1935), 321-323. In 1806 William Tatham noted "handsome two story houses" at Cape Hatteras, undoubtedly of this type ("The separate Report of William Tatham one of the Commissioners appointed to survey the Coast of North Carolina from Cape Hatteras to Cape Fear inclusive, under the Act of Congress of the 10th of April last" (MS in library of the U. S. Coast and Geodetic Survey, Washington, D. C., January, 1807), 49). In the late 1850's Edward Bruce sketched, in a single panoramic view, twenty-seven houses on the sound side of Roanoke Island, "all of wood, all two stories high, and all having double porticoes on each side," but unfortunately this sketch was not published ("Loungings in the Footprints of the Pioneers," Harper's New Monthly Magazine, vol. 20, no. 120 (May, 1860), 736).
28. These fences were probably picket, brush, or post-and-rail fences, not the Virginian or worm fence which was so wasteful of wood and space. These worm ("snake," "zig-zag," etc.) fences were very popular on the mainland, however, and, with well sweeps, were an important diagnostic element in the farmstead complex. As late as 1870 96% of the rural fences in North Carolina were worm fences ("Statistics of Fences in the United States," Report of the Commissioner

of Agriculture for the Year 1871 (Washington: GPO, 1872), 503), and, lacking records, one can infer that they were equally popular in colonial days. Possibly snake fences and well sweeps were found on Roanoke Island, but it is less likely that they were found on the Banks.

The origin of the snake fence is obscure. Some say that it was invented in early Virginia because of the abundance of wood and the scarcity of nails, but this easy explanation smacks of determinism. P. Bruce, op. cit., vol. 1, 316-318. Some have called it an Indian invention, but this also seems unlikely. See H. F. Raup, "The Fence in the Cultural Landscape," Western Folklore, vol. 6, no. 1 (January, 1947), 2; and D. Leechman, "Good Fences Make Good Neighbors," Canadian Geographical Journal, vol. 47, no. 6 (December, 1953), 222. Raup and Leechman could find no evidence that the snake fence principle was ever used in Europe, but perhaps they did not carry their researches far enough to discover European examples. H. C. Mercer, Ancient Carpenters' Tools, 2nd ed. (Doylestown, Pa.: Bucks County Historical Society, 1951), 20, cites an example of a snake fence from the Tyrol. Since the Tyrol is well known as a living museum of culture traits, one might suspect that the snake fence was European and that the idea of building them was brought by the first colonists to America.

29. Salt was rarely produced locally. In times of war, however, some attempts were made to produce salt along the coast. One place where salt was produced in the War of 1812, and perhaps earlier, was on the Banks near Currituck Inlet (H. B. Ansell, "Recollections," vol. 1, 63 (MS journal in the Southern Historical Collection, University of North Carolina)). During the Revolution Richard Blackledge established a salt works near Beaufort (CR, vol. 10, 716-717), but there was not enough to supply the great demand, and salt had to be imported, some from France but mostly from Bermuda (State Records of North Carolina, vol. 13, 380. Hereafter cited as SR). Throughout the colonial period North Carolinians obtained their salt from abroad. Salt produced by the British, as on the Isle of Man and Turks Islands, was characterized as "too strong," and the colonials preferred the more expensive salt from Spain and Portugal (CR, vol. 5, 322).
30. Probably the gear consisted of dip nets, small seines, and even hands! Pots, weirs, fykes, lines, and spears were all known in America at this time, but it is not known whether they were used in coastal North Carolina.
31. The people of this area early distinguished between a one-log dugout, which was called a "canoe," and the "perrianger" (many spellings), which was made of more than one log. See F. W. Clonts, "Travel and Transportation in Colonial North Carolina," NCHR, vol. 3, no. 1 (January, 1926), 17-19; C. C. Crittenden, The Commerce of North Carolina, 1763-1789

(New Haven: Yale University Press, 1936), 15-16; H. I. Chapelle, American Small Sailing Craft (New York: W. W. Norton & Co., Inc., 1951), 18; T. T. Quirke, Canoes the World Over (Urbana: University of Illinois Press, 1952), 45; Lawson, op. cit., 99. The dugout was one of the most important items borrowed from the Indians, but the Europeans used their own tools and soon produced so many modifications of form that the Indian ancestry was disguised. See also M. V. Brewington, Chesapeake Log Canoes, part 1 (Newport News: The Mariners Museum, 1937).

32. Lawson, op. cit., 88, 162. The whale fishery on the banks near Cape Lookout, which was confined to small boats going out from shore, was very old and the date of its origin is unknown. In 1765 a French traveler reported "whale fishers tents" on Shackleford Banks. See "Journal of a French Traveller in the Colonies, 1765, I," American Historical Review, vol 26, no. 4 (July, 1921), 733. This whaling went out around 1890-1900. H. H. Brimley, A North Carolina Naturalist, H. H. Brimley: Selections from His Writings, ed. by E. P. Odum (Chapel Hill: University of North Carolina Press, 1949), 106-107.

For description of this Cape Lookout whale fishery, see G. B. Goode et. al., The Fisheries and Fisheries Industries of the United States, Section 2, A Geographical Review of the Fisheries Industries and Fishing Communities for the Year 1880, 490, and Section 5, History and Methods of the Fisheries, vol. 2, 48-49. Hereafter this series by Goode and associates will be referred to as Goode et al, Fisheries.

33. Ibid., 162. CR, vol. 1, 419, records a squabble over the ownership of a dead whale in 1694 (on Currituck Banks?).
34. The Bankers did not consider this as stealing but regarded unclaimed articles washed up on the beach as theirs simply because they lived in the vicinity. One wonders how many people could be supported by the gathering of timber and goods from wrecks and by extracting oil from dead whales. Probably there were never any full-time "beach combers" or "strand-loopers," but it may have been common practice for Bankers to travel up and down the beach periodically, especially after storms, to collect any valuable articles. Since outsiders could not see the many means of subsistence of the Bankers, they commonly reported that the latter subsist only by wrecking.

In 1679 Robert Houlden (Holden) was given a commission by the Proprietors "to looke after Receive and Recover all Wrecks Ambergrice or any other Ejections of the Sea" (CR, vol. 1, 240-241), but apparently Houlden as an individual could not look after the entire coast.

Many items, especially perishable goods, could not be recovered or could not be economically removed from the Banks. When a cargo was rendered valueless, the Bankers could just take what they wanted.

35. CR, vol. 1, 527, 547. Randolph's dislike for colonials is well known.
36. CR, vol. 4, 1300-1306.
37. SR, vol. 12, 140.
38. SR, vol. 13, 147.
39. References to wrecking in the literature always say that the days of wrecking were some time in the past. There are no references to it as a current practice, which fact, together with the lack of documentary support for wrecking, makes it seem unlikely that the Bankers are very culpable in this regard. Some of the stories about luring ships ashore (see note 8 above) have also been told about other coastal areas, e. g., the North Pembrokehire coast--the Welsh Cornwall--which was supposed to be the home of many illustrious pirates and wreckers (Letter to the writer from Dr. E. E. Evans, Department of Geography, The Queen's University, Belfast, March 30, 1955).
40. From the first days of settlement it was recognized that the navigation difficulties definitely hampered trade and prevented North Carolina ports from attaining the size and importance of more favored cities to the north. There were constant complaints about the dangers and inadequacy of the inlets.
 Typical of these complaints was Robert Holden's (Houlden--see note 34 above) remark in a letter to the Lords of Trade, May 21, 1707, that North Carolina "has barrd Inlets into It; which spoyles the trade of it and none but small vessells from New England and Bermoodas trades there" (CR, vol. 1, 663). "The bar hurts this place much" said a French traveler in 1765, discussing Edenton ("Journal of a French Traveller," 738).
 There were a few weak voices to the contrary. On January 1, 1733, Governor Burrington in a letter to the Lords of Trade said, "It is by most Traders in London believed, that the Coast of this Country is very dangerous, but in reality not so. There are no more than about three shoals in about four hundred miles on the sea-side. Cape Fear river, Beaufort & Ocacock are very good harbours, will admitt the largest Merchant ships, as may be seen by the Drafts of these places, made by my orders, and sent the Lords of Trade" (CR, vol. 3, 430).
41. J. A. Emmerton, A Record of the Twenty-third Regiment, Massachusetts Volunteer Infantry in the War of the Rebellion, 1861-1865 (Boston: William Ware and Co., 1886), 34, reported that in 1738 there was another Hatteras Inlet six miles to the south of the present one, but an English ship ran aground in it, and the inlet was closed completely.

Emmerton found two old men in 1862 who knew this story. Collier Cobb told the same story, but he made two curious errors in relating dates. Cobb said, "A former Hatteras Inlet, about six miles to the southwest of the present Hatteras Inlet, was closed in 1839 by the stranding of an English vessel in the inlet, followed by the sanding up of the wreck, and the 'making down' of the beach. . . . The last chart to show this inlet is Wimble's map, 1838" ("Some Changes in the North Carolina Coast since 1585," North Carolina Booklet, vol. 4, no. 9 (January, 1905), 11). Wimble's map was published in 1738, not 1838, and similarly one can say that Cobb really meant to say 1739, not 1839, for the date of the closing of the inlet. J. S. Hewins, "The Morphology and Cartography of the North Carolina Coast" (Unpublished Master's thesis, University of Maryland, 1950), 87, uncritically repeats Cobb's date of 1839. The story about the English wreck causing the closing of the inlet is also found in Welch, op. cit., 41, but Welch does not assign a date to the closing. Welch states that the story was told to a man who was 75 years old in 1884 by the man's grandfather, who died at 86 in 1825. The grandfather was thus born about 1739, but he gave a first-hand account of the closing of the inlet. 1739 may be too early a date for this story, therefore. Engels, after reading Welch, deduced that the inlet must have closed about 1750. See Engels, op. cit., 278.

42. Gov. Dobbs in a letter to the Lords of Trade, January 4, 1755, concerning inlets said that "Stattera" / "Hatteras" was then "often closed up" (CR, vol. 5, 316). On March 29, 1764, Dobbs reported that "Hatteras" / "was" closed up" (CR, vol. 6, 1027). Daniel Dunbabin's "Chart of the Coast of America from Cape Hatteras to Cape Roman," the result of his survey of 1756, does not show Hatteras Inlet. Dunbabin's map was apparently first published in 1792 in Norman's American Pilot. Welch, op. cit., cites it as Dunbabin's chart of 1764, published by Norman in 1794. Cobb, "Some Changes in the North Carolina Coast since 1585," 11, calls it "Dundibbin's chart of 1764."

1755 might then be a reasonable estimate of the date of final closing of Hatteras Inlet. For a map and other information of inlet changes from 1585 to the present, see Appendix A of this dissertation.

43. " . . . the year 1713 when a Violent Storm opened a new Inlet, about 5 Miles South of the old one; since which Convulsion, the Old Inlet is almost choakd up by the Shifting of the Sand, and grows both Narrower and Shoaller every day We also saw a small New England Sloop riding in the Sound, a little to the South of our Course. She had come in at the New-Inlet, as all other vessels have done since the opening of it. This Navigation is a little difficult, and fit only for Vessels that draw no more than ten feet Water It was just Noon before we arrived at Coratuck Inlet, which is now so shallow that

the Breakers fly over it with a horrible Sound, and at the same time afford a very wild Prospect. On the North side of the Inlet, the High Land terminated in a Bluff Point from which a Spit of Sand extended itself towards the South-East, full half a Mile. The Inlet lies between that Spit and another on the South of it, leaving an opening of not quite a Mile, which at this day is not practicable for any Vessel whatsoever" (Byrd, op. cit., 40, 42).

44. "Curratuck Inlet is shut up," Gov. Burrington reported to the Lords of Trade, September 4, 1731 (CR, vol. 3, 210).
45. On June 2, 1665, Thomas Woodward, Surveyor of Albemarle, wrote to Sir John Colleton, "And the Inhabitants of all the Streams and rivers within this Government must be supplied with Commodities from such Vessells as shall arrive through Roanoke Inlett which for ought we can perceive must always be of very small burthen. for although Capt Whitties vessell this winter at her coming in found fifteene feete water, yet her going out she had but eleaven feete and though she drew not eight feete water, struck twice or thrice notwithstanding they had Beatoned / beaconed? the Chanell and went out in the best of it, at full sea; so uncertaine are all those Inletts. There is another Inlett at Wococock or Wococon which hereafter may serve for an other Government betweene this and Cape Feare, if to your Honore it shall seem Convenient" (CR, vol. 1, 99-100).
Edward Randolph on November 10, 1696, reported, "The Inlet of Roanoake is frequented with small vessells trading to & from the West India Islands" (CR, vol. 1, 467).
Gov. Burrington in a letter to the Lords of Trade, September 4, 1731, said, "Roanock is so dangerous that few people care to use it but go round to Ocacock" (CR, vol. 3, 210). On July 20, 1736, Burrington in a letter to the Commissioners of His Majesty's Customs said concerning Roanoke Inlet, "very small Vessels and of small Burden use it, by reason of the great danger there is in passing, the Channel often shifting. I have known this Inlett to have no more than six feet and a half of water on the Bar, therefore most of the shipping that trade in Roanoak Collection come in and go out at Ocacock, which is the only place that has a sufficient depth of water for a ship of Burden between Topsail and the Capes of Virginia" (CR, vol. 4, 170).
46. Ocracoke Inlet had the deepest channel and was therefore early recognized as the best of the available entrances into the sounds. In the very first years of the colony the inlet was too far from the Albemarle area, and the Albemarle vessels preferred to use Roanoke and Currituck inlets, especially in trading with the north. See note 45 above. With the settling of the areas south of Albemarle Sound, Ocracoke Inlet received the largest share of the traffic.

Although the Ocracoke ("Wococon") Inlet of 1585 may

not have been in the same position as the present Ocracoke Inlet (Quinn, Roanoke, 867), there has always existed an inlet approximately at that location. For all practical purposes, one can say that Ocracoke Inlet has been open continuously since 1585.

47. Lawson, op. cit., 64.
48. "Journal of a French Traveller," 735. F. X. Martin, The History of North Carolina, from the Earliest Period, vol. 2 (New Orleans: A. T. Penniman & Co., 1829), 61-62.
49. SR, vol. 23, 40-42. See also C. Parker, The History of Taxation in North Carolina in the Colonial Period, 1663-1776 (New York: Columbia University Press, 1928), 94. It is difficult to determine how soon these proposals were acted upon. The Legislative Journals of July 7, 1733, record the reading of the petition of the Commissioners for "Buoying and Beaconing of Ocacock Inlett and Channel" (CR, vol. 3, 574). These journals on November 12, 1734, mention the reading of Capt. Miles Gale's proposals for buoying and beaconing Ocracoke Inlet (CR, vol. 3, 642). It must have been just about this time that channel markers and beacons were established at Ocracoke Inlet. Moseley's map of 1733 says that Beacon Island has "two large Beacons on it." This may be the first map to show the name "Beacon Island" and may thus be the first indication of actual material improvements in the navigation of Ocracoke Inlet.
50. SR, vol. 23, 40-42; SR, vol. 25, 160.
51. CR, vol. 2, 200.
52. CR, vol. 3, 638. See CR, vol. 3, 210, for a statement by Burrington in 1731 that there were pilots available who knew all the inlets. It is not known where these pilots resided.
53. CR, vol. 2, 611.
54. Lawson, op. cit., 175.
55. SR, vol. 22, 111, 403; CR, vol. 4, x1, 922, 1306; Connor, op. cit., 263-265. Also see a series of items edited by D. L. Corbitt in the "Historical Notes" section of the NCHR, vol. 3, no. 1 (January, 1926), 127-130. J. F. Jameson, ed., Privateering and Piracy in the Colonial Period: Illustrative Documents (New York: The Macmillan Company, 1923), 399. "Journals of the Council of Virginia in Executive Sessions, 1737-1763," VMHB, vol. 15, no. 2 (October, 1907), 124.

On September 15, 1741, a Spanish schooner went aground at Hatteras Inlet and was captured (Vice Admiralty Papers, vol. 2, 71-82, MS volume in N. C. State Department

of Archives and History-From David Stick's notes).

56. CR, vol. 6, 1028. French privateers were infesting the coast in 1756 (British Foreign Office and Board of Trade, "List of Papers Relative to North Carolina (1663-1827)," p. 46, Manuscript Division of the Library of Congress).
57. Crittenden, op. cit., 122-124.
58. See Note 7 above.
59. CR, vol. 10, 526.
60. SR, vol. 11, 775.
61. SR, vol. 13, 285.
62. SR, vol. 14, 139.
63. SR, vol. 14, 135.
64. SR, vol. 22, 496-498, 939.
65. Crittenden, op. cit., 122-124. Also SR, vol. 13, 459; CR, vol. 10, 549; "Notes" VMHB, vol. 15, no. 2 (October, 1907), 163; "Virginia Legislative Papers," VMHB, vol. 16, no. 1 (July, 1908), 45-46.
66. SR, vol. 13, 367.
67. CR, vol. 1, 467, 527. See also H. T. Lefler and A. R. Newsome, North Carolina (Chapel Hill: University of North Carolina Press, 1954), 62-63.
68. P. Pringle, Jolly Roger: The Story of the Great Age of Piracy (New York: W. W. Norton and Co., Inc., 1953), 193. S. C. Hughson, The Carolina Pirates and Colonial Commerce, 1670-1740 (Baltimore: John Hopkins University, 1894), 52.
69. Pringle, op. cit., 192-193. Gray, op. cit., 44. R. A. Brock, ed., The Original Letters of Alexander Spotswood, vol. 2 (Richmond: Virginia Historical Society, 1885), 318. Lefler and Newsome, op. cit., 63-64.
70. Hughson, op. cit., 59. Pringle, op. cit., 193
71. Pringle, op. cit., 193.
72. In 1717 he sometimes careened on the Virginia coast and also in North Carolina, probably at Cape Fear. In January, 1718, he made a mysterious visit to Bath, in which it appears that Gov. Charles Eden and Tobias Knight, Collector of Customs, were drawn into a nefarious agreement which would allow Teach to continue his piratical voyages from North Carolina without official molestation. He then went

to Charleston, a favorite haunt of pirates, who, Gov. Johnson complained, "at some times blocked up our harbour for eight or ten days together, and taken all that have come in or gone out." He later put in at Topsail (Old Topsail, present Beaufort) Inlet and then appeared at Bath. Later Vane, another pirate, found Teach at Ocracoke. After he left Ocracoke he may have gone to Philadelphia, then to Bath, Bermuda, and back to Bath. Pringle, op. cit., 191-193, 196-197, 199.

This seems to be a reasonable synopsis of his itinerary in 1717-1718, and thus Hughson's statement that "Thatch had for some time made Ocracoke Inlet, on the North Carolina coast, his chief resort" is not wholly true (Hughson, op. cit., 69).

73. Pringle, op. cit., 202.
74. Brock, op. cit., 273-274. Hughson, op. cit., 77. Pringle, op. cit., 203. CR, vol. 2, 325. Teach's name is perpetuated at Ocracoke by "Teaches Hole," the channel between the village and the inlet. See USC&GS Chart 1232, "Pamlico Sound--Western Part," 8th ed., 1938, corrected to 1954. The name is an old one. It appears perhaps first on Moseley's 1733 map as "Thatch's Hole."
75. Pringle, op. cit., 209.
76. CR, vol. 4, 169.
77. Loc. cit. Parker, op. cit., 84. "The Randolph Manuscript," VMHB, vol. 19, no. 2 (April, 1911), 154.
78. R. E. Moody, ed., "Massachusetts Trade with Carolina," NCHR, vol. 20, no. 1 (January, 1943), 43-53. C. M. Andrews, The Colonial Period of American History, III, The Settlements (New Haven: Yale University Press, 1937), 248-249, 252-253. B. Bailyn, The New England Merchants in the Seventeenth Century (Cambridge: Harvard University Press, 1955), 147-148. Parker, op. cit., 75, 84.

As usual, one of the finest quotes on the subject comes from William Byrd, who said, "The Trade hither is engrossed by the Saints of New England, who carry off a great deal of Tobacco, without troubling themselves with paying that Impertinent Duty of a Penny a Pound" (Byrd, op. cit., 42).
79. "Vice Admiralty Papers," vol. 1, 124-134 (Ms volume in N. C. State Department of Archives and History--David Stick's notes), record the confiscation of a sloop on Feb. 20, 1734, after the master had sold rum and ozenbriggs (linen) without clearance.

Also in 1734 "a ship from Guernsey laden with French Wines, Brandy, Tea, Woollen and other prohibited Commodities came in at Ocacock, in the harbour the goods were put on

Board a vessel belonging to the Country and sent through Pamticough and Albemarle Sounds into Virginia and there delivered to some Merchants of the Country" (CR, vol. 4, 170).

80. CR, vol. 1, 229.
81. SR, vol. 25, 201-204. Maule's map of Roanoke Island, 1718, shows two "settlements" on the island: one is in the southeastern corner and the other is on the shores of "Back Bay" (Croatan Sound) about midway between the north and south ends. It cannot be known whether this meant there was only one homestead or a cluster of houses at each spot. Clayton's map of 1761 shows nine house symbols on Roanoke, all on the east side. Four of the houses were in a cluster on "Gibs. Creek" (Shallow Bag Bay). On the 1768 Collet map there were ten house symbols on Roanoke, seven of which were bordering Croatan Sound.
82. CR, vol. 3, 155-156, 210.
83. CR, vol. 3, 336, 430, 622; vol. 4, 172-173.
84. See note 52 above. See Rondthaler, The Story of Ocracoke, 2-3, for notes about Ocracoke pilots in 1746, 1755, and 1764.
85. CR, vol. 4, 1300-1301.
86. See note 55 above. In 1749 Gov. Johnston urged the building of a fort at Ocracoke Inlet (CR, vol. 4, 922).
87. Carteret County Deed Book "A, B, C, E & F," 378 (From notes made by David Stick at Carteret County Courthouse at Beaufort). Contrary to Crittenden's statement that Portsmouth "never existed except on paper" (Crittenden, op. cit., 6), there is evidence to show that a town was begun at this time. In 1759 the Council Journals recorded that "Valentine Wade one of his Majestys Justices of the Peace for the County of Carteret and who keeps a Tavern in the Town of Portsmouth in said County, Permits suffers and encourages disorderly persons, to dance and play at cards and dice in his house upon the Lords Day" (CR, vol. 6, 82). In 1766 Rev. Stuart (Stewart - see note 24 above) reported to the Secretary of the SPG that he had been "at the little Town of Portsmouth . . . a few days for the bathing in the salt water and have baptized twenty seven children from the different Islands round me" (CR, vol. 7, 264). Collet's map of 1770 shows Portsmouth, the first map to do so. In 1795 Jonathan Price stated, "In the year 1753, or the following, a town was laid off here [Portsmouth] in pursuance to an act of assembly, but it does not appear to have ever been settled. A fort was also about the same time erected--but there remains now no vestige of either" (J. Price, "Description of Occacock Inlet," NCHR, vol. 3, no. 4 (October, 1926), 627). However, Price's map, p. 633,

shows houses at Portsmouth. Portsmouth's population in 1800 was 221, of which 79 were slaves (1800 (2nd) Census, North Carolina, vol. 5, Carteret County, 57-58, Microfilm copy in N. C. State Department of Archives and History). Portsmouth's population in 1790 is difficult to estimate because no subdivisions of counties were made. One can see, however, that Portsmouth was then a small village, perhaps not too much smaller than in 1800 (SR, vol. 26, 368). Price's statement is not understandable in light of all these facts.

It is popularly believed that Portsmouth once had a population of about 1000. However, in a census year, at least, it appears never to have had a population greater than 505, 117 of whom were slaves (1850 (8th) Census, North Carolina, vol. 3, Carteret County, 217-226. Slave Schedules, vol. 2, Carteret County, 1-3). The 1860 census is difficult to compute.

88. CR, vol. 5, 343, 596-597; Price, op. cit., 627.
89. These were not the first settlements. Their origin and comparatively rapid growth are linked to the importance of Ocracoke Inlet. David Stick has put forth the interesting thesis that the first settlements were near inlets. However, the first homesites and small settlements were in hammocks quite irrespective of proximity to inlets. The first criterion in site selection was the choice of a wooded, therefore unexposed, location. Having a commercially important inlet nearby, as in the case of Ocracoke Inlet, gave some settlements a greater growth, but the small settlements established before Ocracoke and Portsmouth were not consciously located with respect to inlets. The areas first settled on the Banks were Colington and Roanoke islands and the wooded sound shore from present Duck to Nags Head. Kinnakeet (Avon) is apparently an old settlement (see the 1733 Moseley map), but it is not near an inlet. For one thing, the livelihood of most of these early Bankers did not depend upon the commerce of the inlets. When it was seen that they could capitalize on the inlets by becoming pilots, sailors, shopkeepers, etc., the settlement sites near inlets suddenly acquired new function and growth.
90. Ocracoke did not exceed Portsmouth in size in a census year until 1830. See 1830 (5th) Census, North Carolina, vol. 3, Carteret County, Portsmouth District, pp. 119-121, and Ocrecock District, 121-123, Microfilm in N. C. State Department of Archives and History. In using these figures, it is reasonable to assume that all but a negligible few in Ocrecock District lived in the village of Ocracoke and that most of the inhabitants of Portsmouth District lived in the village of Portsmouth.
91. See notes 52 and 84 above. Price, op. cit., 625, stated in 1795 that the inhabitants of Ocracoke "are all pilots; and their number of head of family is about thirty."

Francisco de Miranda in 1783 remarked on the skill of the Ocracoke pilots, the excellence of their boats, and the vigor and corpulence of the Bankers. "All the people who came aboard our ship seemed very robust and fat to me. The same I noted to be true in the case of the women and children whom I later saw. The people of that country attribute their fleshiness to their food which consists entirely of fish, oysters and some few vegetables which they cultivate not far from their houses." J. F. Rippey, "A View of the Carolinas in 1783," NCHR, vol. 6, no. 4 (October, 1929), 362.

When the village of Ocracoke was first named on maps it was called "Pilot Town." This name may first appear on the Lewis map of 1818, "North Carolina from the Latest Surveys" (Map Division, Library of Congress) and may have been a name for the settlement until the Ocracoke Post Office was established in 1840 (David Stick's notes from National Archives, RG 28: Records of the Post Office Department). Ocracoke was probably always the popular name for the village. David Stick reports that he has never seen the name "Pilot Town" except on maps (Letter to the writer, Feb. 24, 1956).

92. Doubtless these settlements had names, even though they did not appear on maps. On the 1733 Moseley map the name "Neal" is written at present Avon, and the name "Gibbs" occurs at present Hatteras. This does not mean that these were former names for these settlements, but that these were homesites occupied by families of that name. How large these little settlements were at that time cannot be known. Collet's 1770 map shows the name "Wallaces" in the Chicamacomico area.
93. Wimble's 1738 map shows habitations on the sound side north of Roanoke Inlet. Maule's 1718 map, Clayton's 1761 map, and Collet's 1768 and 1770 maps show houses on Roanoke Island. See note 81 above. Lancaster's 1679 map shows a house on Colington (note 12 above). However, one cannot assume that the homesites shown on these small-scale maps were the only ones existing. A further study of deeds would shed further light on this.
94. This is one of the most important and fundamental problems in the history of the Outer Banks. It is popularly believed that at one time the Banks were forested from one end to the other and from the sound side to the very beach itself and that the present landscape is the result of disastrous deforestation by man and animals, mostly in the last century. For a cogent statement of the argument against great changes see C. W. Porter, "Forest Cover of the Cape Hatteras Seashore Area in Historical Times," May 16, 1938, Unpublished typescript in Research File, Office of the Historian, National Park Service, Washington, D. C. A similar statement is that of H. S. Ladd, "Forest Cover in the Cape Hatteras National Seashore Area," May 19, 1938, Unpublished typescript

in Research File, Office of the Historian, National Park Service.

There is nowhere any indication that the Banks were covered with unbroken forest. If they had been, there would have been no need to indicate forested areas on maps. Some of the old maps point out wooded areas on Hatteras Island. These would not be marked if the whole island were wooded. Wimble's map of 1738 indicates "Woodland" at the Cape and "Homicky Land" in the Chicamacomico area. On Moseley's 1733 map it states "the Cape land is full of low trees."

Price in 1795 said, "The coast [beach] from Occacock to Cape Hatteras is sandy and barren . . . Cape Hatteras and the land from it towards Occacock, to the distance of about thirteen miles, are covered with large evergreen trees, such as live oak, pine and cedar. Here are three large and remarkable sand hills, called Stowe's [present Styron] Hills. The coast afterward is a bald beach [here he is talking about the whole island], intersperced with a few low sand hills; about eleven miles farther is a group of trees, called the Six Mile Hammock, from its distance from Occacock--from thence the coast is quite barren and sandy. . . . Towards the Ocean, Core Banks are sandy and barren, and towards the sound is a large marsh: small shrubs cover the middle ground" (Price, op. cit., 625-627). Unfortunately, more good topographical descriptions like Price's cannot be found. Price's remark about "shrubs" brings up an important point. Tatham in 1807 mentioned "woods (as the shrubs are here called . . .)." See Tatham, op. cit., second page of his appendix (unpaged). What the Bankers term "woods" might not be impressive to a visitor, who might then call these low stands "shrubs." The visitor might think deforestation has taken place.

A "beach forest," a stand of trees growing at or near the beach, cannot exist because wind-borne salt spray would prevent it. To be sure, stumps are periodically uncovered on the beach by storms, as at Corolla, Kitty Hawk, Rodanthe, etc., but this is an indication that at the time these were living trees the beach lay considerably further to the eastward, not that trees actually grew near the water. It is not known how long it takes for this much beach erosion to occur. However, the beach erosion in historic time has been so slow that it has almost gone unnoticed, except in spectacular cases like the erosion near Hatteras Light. The only major change in the coastal configuration in historic time was the removal of Cape Kenrick, which may have occurred shortly after 1657 (Quinn, Roanoke, 864). The beach erosion is not everywhere proceeding at the same rate; indeed, in some areas accretion is noted. Slower still is the erosion of the sound shores.

That local changes in forest cover have occurred cannot, of course, be denied. There has been a definite reduction in area of some of the wooded tracts. The Bankers have always been rather chary of their limited wood supply. Having established their homes in the wooded areas for

protection, they would not then remove this protection. They cut some wood for their own use, but they did so quite judiciously. The valuable cedar, however, was eagerly sought and cut extensively.

Livestock grazed widely on the Banks for almost two centuries before they began to be blamed for deforestation. It is probable that grazing animals can retard regrowth, but as a cause of deforestation they are being blamed unduly.

Further reference will be made to this problem in Chapter 5. The evidence at hand, however, shows that no large changes have taken place in the forest cover of the Outer Banks in historic time.

CHAPTER IV

THE BANKS IN THE FEDERAL PERIOD

The early Federal Period in northeastern North Carolina was marked by plans to improve navigation through the inlets or to construct canals which would circumvent the hazards of the Outer Banks altogether. The canal-building schemes, beginning with the Dismal Swamp Canal and ending in the 20th century with the Intra-Coastal Waterway, were to prove ultimately to be much more effective and valuable than were the schemes to improve channels and inlets.

The Dismal Swamp Canal was chartered in 1787. Work on the canal was begun in 1793 and completed in 1805.¹ This canal was to provide good, safe, all-water transport between Albemarle Sound and Norfolk, a city which was already recognized as the natural outport for northeastern North Carolina.²

It soon became evident, however, that the Dismal Swamp Canal was not adequate to serve the needs of the growing commerce of the area. It was too small for most steamers, had currents which hindered navigation, and was in general characterized as "shallow and tedious and costly."³ As a result the Albemarle and Chesapeake Canal came into being. This canal, begun in 1855 and finished in 1859, was deeper, safer, and more convenient than the Dismal Swamp Canal and was to grow in importance at the expense of the latter.⁴

A third canal, less important than the above two, was the Clubfoot and Harlow's Creek Canal between the Neuse River and Beaufort, which was designed for movement of the Neuse commerce without the dangers of Ocracoke. The Clubfoot and Harlow's Creek Canal Company was incorporated in 1796, but the canal was not opened until about 1826. It was used by small craft until 1856, when its locks broke down and the route was abandoned.⁵

Roads and railroads were to divert commerce still further from the inlets. Roads were vastly improved by 1860, but the only rail connection to serve the sounds directly at that time was the Atlantic and North Carolina Railroad which ran from Goldsboro through New Bern to Morehead City, opposite Beaufort, and was completed in 1858.⁶

Thus, by the beginning of the Civil War, the Carolina Sounds were still not adequately served by canals and railroads. By 1860 the Clubfoot and Harlow's Creek Canal was defunct, the Dismal Swamp Canal was run down, and the Albemarle and Chesapeake Canal and Atlantic and North Carolina Railroad were just getting started. Throughout the Federal Period, the inlets were still quite important to the commerce of the State.

Roanoke Inlet, scarcely used in the 18th century, finally closed about 1811.⁷ As early as 1787 the State Legislature had passed an act authorizing certain individuals to receive subscriptions for the construction of a useful inlet through the Banks in the vicinity of Roanoke Island.⁸ It was said that if a deep inlet were built and maintained here at the eastern end of Albemarle Sound, "The extensive fertile country watered

by the Roanoke and its branches, would concentrate its produce at some point near the head of Albemarle Sound, and we should soon have in that quarter a market that would rival that of Norfolk."⁹ North Carolinians wanted thus to ameliorate the situation whereby they were "humiliated by being under the necessity of seeking Ships at Norfolk, instead of having them in our own Ports."¹⁰ Surveys and projects for the proposed inlet were made by Clarke in 1816, Fulton in 1820, Bache in 1829, Gwynn in 1840, and Woodbury in 1853.¹¹ All of these projects proposed the damming of Croatan and Roanoke sounds and the cutting of an inlet through the Banks at or near the site of the old Roanoke Inlet. Only Woodbury's plan was implemented. In 1856 digging was commenced through the Banks, but in the following year the project was recognized as hopeless and was abandoned.¹²

Currituck Inlet, which enjoyed a modest commerce up to the time of its death, closed in 1828.¹³ A plan was made immediately to reopen this inlet,¹⁴ but nothing ever came of it. The closing of the inlet resulted in the reorientation of the commerce of Currituck Sound, and the freshening of the waters of the sound meant the end of oystering and of salt-water fishing there.¹⁵

An inlet which may have had a continuous existence throughout this period but which was not useful for navigation was New Inlet. The name "New Inlet" first appears at that place on the 1798 Price and Strother map, but an inlet had existed there at least since 1733, when it was called "Chickinocominock" on the Moseley map, and may be represented

on the disproportionate Nairne and Lawson maps.¹⁶ This inlet, ignored by mariners because of its shallowness, nevertheless was well known to anadromous fishes, who made it their preferred entrance into the sounds.

Ocracoke Inlet was still regarded as commercially the most important inlet in the early Federal Period. In 1816 A. D. Murphey said, "At this time (and for many years to come it will so continue) all of the trade of the Pamlico and great part of that of the Albemarle sounds is carried on through this inlet."¹⁷ However, the depth of the inlet had lessened since colonial days, and the ships of commerce were getting larger. Murphey stated in 1819:

No part of our coast seems to be subject to greater or more frequent changes than that near Ocracoke . . . The Inlet has widened very much within the last fifty years, and the depth of water across the Bar has lessened . . . Vessels drawing more than eight feet water, have to lighter in crossing the swash; and this circumstance, added to the other of there being no harbor, renders the Navigation through this Inlet not only inconvenient, but often extremely dangerous. To lessen this inconvenience, it has been proposed to use Camels for taking vessels across the swash; and to lessen the dangers of Navigation, it has been proposed to sink Piers, mooring anchors and Chains. The peculiar gurgitating quality of the sands at this Inlet, renders it very doubtful whether any erection of piers would prove permanent . . . there seems to be but little ground to hope that this Inlet can be so improved that a safe and commodious Navigation can be had through it, yet if a better Outlet cannot be found for the rich commerce of these rivers, such improvement should be made at Ocracoke as the situation of the Inlet will admit, and the revenues of the State be able to meet. The difficulties and dangers attending the Inlet at Ocracoke, have directed the public attention 1st. To the opening of an Inlet at the lower end of Albemarle Sound. 2dly, To the opening of a communication by Navigable Canals from the Roanoke to the Inlet at Beaufort.¹⁸

One can see that the navigation difficulties at Ocracoke thus stimulated the surveys to reopen Roanoke Inlet

and also the building of the Clubfoot and Harlow's Creek Canal.¹⁹ There were definite plans made also for the improvement of Ocracoke Inlet itself. The General Assembly of North Carolina in its 1827-28 session passed "An act to incorporate the Occacock Navigation Company."²⁰ This private company was to improve navigation over the Swash²¹ and to receive tolls, but nothing ever came of this project.²² In 1821 and 1827 surveys of the inlet were made by the Army Engineers.²³ Dredging was begun in the channels in 1830, but all work of improvement was abandoned after 1837.²⁴ The decline in the usefulness of Ocracoke Inlet led to the ascendancy of Hatteras Inlet to the position of primacy among the inlets in the 1850's, a position which Ocracoke Inlet did not regain until the 1890's.²⁵

Hatteras and Oregon inlets were both opened during the same storm, on September 8, 1846, and have remained open ever since.²⁶ Oregon Inlet has always been used by small vessels, mostly fishing boats, but it was never used by larger vessels.²⁷ Hatteras Inlet, on the other hand, matured sufficiently by the middle 1850's to assume the position of supremacy among the inlets.²⁸

The number of pilots can be used as a rough indicator of the use of inlets by commerce and of the comparative importance of Ocracoke and Hatteras inlets. In the 1850 census, the first census to give a thorough occupational breakdown, there were 57 pilots living at Ocracoke and Portsmouth but only 11 at or near Hatteras Inlet.²⁹ By 1860 the total number of pilots at both inlets had dropped slightly, and Hatteras Inlet, with about 35 pilots, had about 8 more pilots than Ocracoke Inlet.³⁰ There

are indications that some of the pilots at Ocracoke Inlet in 1850 moved to Hatteras Inlet before the next census.³¹

Besides the small amount of improvement of inlets and channels, there were other aids to navigation instituted in this period. In 1789 the State Legislature passed "An Act to Erect a Light-House on Ocracoke Island."³² Congress in 1794 directed that a "lighted beacon" be established on Shell Castle,³³ and in the following year it was announced that bids were to be received for the building of an "octagonal beacon house" there.³⁴ This lighthouse on Shell Castle was built in 1798, but in the second decade of the 19th century the island was deserted when the channel past it, Wallace's Channel, shoaled, and the commerce of the inlet then moved to a channel which was located near the village of Ocracoke.³⁵ In 1823 the lighthouse at Ocracoke was built.³⁶ In 1798 the first Cape Hatteras Lighthouse was erected, and in 1848 the Bodie Island Lighthouse was established just south of Oregon Inlet.³⁷

Following the Revolution North Carolina became increasingly concerned with the mounting number of vessels cast away on its shores.³⁸ The saving and care of shipwrecked sailors and cargoes had previously been the special concern of no one, and this hazardous, sometimes thankless, task had fallen to the inhabitants of the coast, the Bankers. That they regarded this as not merely an obligation forced upon them by propinquity is shown by the numerous accounts of Bankers making great personal sacrifices, even of their lives, to save crews and cargoes. They were generally rewarded, to be sure, but their prompt and generous assistance leads one to believe that

their first thoughts were not of compensation.³⁹ However, to assure unstinted assistance of all vessels in distress and to regulate vendues, rewards, and fines the General Assembly of North Carolina in 1801 passed an act to establish wreck commissioners (wreck masters) and wreck districts.⁴⁰ According to this act, the county courts of the coastal counties at their first meeting after April 5, 1802, were to appoint two or more "discreet and proper" persons as Commissioners of Wrecks in their respective counties. These commissioners, appointed yearly, were to collect as many men as necessary to go to the assistance of vessels in distress and to take custody of the vessels and goods until reasonable rewards were paid to the "salvers" by the owner of the vessel or by the merchant whose goods were saved. If the goods went unclaimed for a year a public sale or "vendue" was arranged by the wreck master. Unclaimed perishable goods could be sold within twenty days. Money derived from these sales would then be deposited with the county clerk of court. Anyone finding stranded property had to notify the local wreck commissioner. If the goods were hidden and the commissioner were not notified within ten days, the person was subject to a fine equal to double the value of the goods. A commissioner who failed in his trust could be fined three times the value of the goods.⁴¹ It can be seen that the Bankers could supplement their small incomes by assisting in the salvage of wrecked goods and could purchase very cheaply some valuable articles, but, again, it is doubtful that anyone could have made a living solely by wrecking.⁴²

The economy of the Bankers in the Federal Period was

not vastly different from that of colonial times. The great changes were to come immediately after the Civil War. The typical Banker was still a man of varied talents. His garden and few head of stock did not occupy as much time as his marine pursuits.⁴³ Fishing and waterfowl hunting seasons nearly divided the year in Currituck Sound. Around Pamlico Sound fishing, piloting, and boating were each practiced when the occasion demanded. The fact that a single occupational name could not describe the many means of subsistence of the Banker together with the differences among census takers make the old census occupation breakdowns difficult to use.⁴⁴

A small amount of agriculture was practiced, but this largely took the form of garden patches, and there were few who could be classified as full-time farmers. In 1795 Price noted "a few farms" on Core Banks near Portsmouth, "but none of them is considerable."⁴⁵ About 1810 it was said of the Portsmouth area that "the soil is not used for agricultural purposes, more than in Gardens & the raising of a few sweet potatoes, for the growth of which article, it appears to be peculiarly well adapted."⁴⁶ The pilot whom Welch quoted so extensively on the opening of Hatteras Inlet said, "I had an old uncle lived about where the inlet is, who had a fine fig orchard, and many peach trees on his lot, with fine potato patch and garden."⁴⁷ In the 1850 census there were classified as farmers 2 at Portsmouth, none on Ocracoke and Hatteras islands, 11 on the North Banks, and 18 on Roanoke Island.⁴⁸ The 1860 census showed no farmers on Portsmouth, Ocracoke, and Hatteras islands, but 26 on the North Banks and 39 on Roanoke

Island.⁴⁹

Edmund Ruffin's observations, made about 1856, provide the fullest description of the meager agriculture on the Banks.

About five miles below Long island, (in Currituck sound, and in Virginia,) on the reef begins the portion called the "Wash Woods," which extends farther south some six miles, and is bordered, next to the ocean, by high sand-hills, and on the sound side by large marshes. In the central "woods" part some twenty families reside, who gain their living in part by agriculture. They cultivate small patches of Indian corn and sweet potatoes. For the latter the soil is peculiarly well adapted, and they can be there raised in any quantities. Upon these products, and with fowling and fishing these inhabitants subsist . . .

South of Knott's island, (which is of considerable extent, is cultivated, and has many inhabitants,) . . . there is no grain or field culture on the reef, as far as to opposite Powell's Point . . . There, the sand-reef is penetrated by Guinguy's creek, running nearly parallel with the ocean-beach and about a mile distant, and which makes a secure and deep harbor for sea vessels. The land between the creek and the sound is a peninsula of the ordinary sand-reef formation and soil. This and the adjacent land reaching to the ocean is owned by Mr. --- Gallop, who is a cultivator of more surface than all the other proprietors put together, south of Knott's island. Though his land is of the usual loose blowing sand, it produces crops of 2,000 to 2,500 bushels of corn. Most of the ordinary culinary vegetables grow well on the best of these sandy soils, and there are abundant resources of manure, in the old Indian banks of shells, and immense quantities of fish caught in the seines, and worthless for other purposes, to make a rich material for compost manure . . .

Roanoke island, (which, however, I did not see, because of accidental delays in the water trip,) . . . is very productive, and especially in potatoes and garden vegetables.⁵⁰

Stockraising was widespread, but, like gardening, it did not take up the greatest part of the Banker's day and was thus not listed as his occupation in the census. The only mention of stockraising in the census was in 1860 when two men on Hatteras Island received the designation of "herdsman."⁵¹ Possibly some census takers included herding under farming.

The 1810 description of Portsmouth had the following to say about stockraising:

The banks are justly valued for their advantages in raising stock; Horses, Cattle Sheep Goats &^o are raised in considerable numbers without the least expense or trouble to the proprietors more than that of marking . . .

Seven years ago /1803/ an inhabitant of the Island of his own mark, Sheared 700 head of Sheep - had between two hundred & fifty, & three hundred head of cattle & near as many horses - The flesh of the beef & mutton is acknowledged by Epicures, to be vastly superior in point of sweetness to that raised on the Main - It is believed the island at present is overstocked & much benefit would result from a diminution of one third the present number -

Frequent & severe gales of wind for the last five or six years, have at the various times, swept large numbers of them off the Island and destroyed very much the range; as long however as any vestage of the Island remains, the margin of marsh, about one fourth of the breadth, extending the whole length, will afford a considerable food.⁵²

Ruffin described extensive stock raising in two places, in the marsh along the Banks in northern Currituck Sound and on Core Banks. Apparently the largest herds on the Banks were in these two areas, which were very similar to each other in that both were completely or almost completely uninhabited and both were close to the mainland.

/Currituck/ The large marshes are mostly owned by persons who reside on the main-land. The proprietors drive their cattle and sheep to these marshes, where they become fat enough for sale. Bullocks thus fattened will command from twenty to thirty dollars apiece. Sheep are there kept for their wool. . .

/Core Banks/ There are cattle and sheep on the marshes of this portion of the reef, obtaining a poor subsistence indeed, but without any cost or care of their owners. On the other hand, the capital and profits are at much risk, as any lawless depredator can, in security, shoot and carry off any number of these animals. But horses cannot be used for food, (or are not -) and cannot be caught and removed by thieves - and, therefore, the rearing of horses is a very profitable investment for the small amount of capital required for the business. There are some hundreds of horses, of the dwarfish native breed, on this part of the reef between Portsmouth and Beaufort harbor - ranging at large, and wild, (or untamed,) and continuing the race without any care of their numerous proprietors.⁵³

A very remarkable occupation, though not one which supported many people, was that of milling. The mills on the

Banks were all windmills since watermills were not feasible.⁵⁴ For a map of the location of windmills in northeastern North Carolina in the 19th century, see the map, Plate III, on the next page.⁵⁵ The Banks in the last century were very notable for the large number of windmills, which led one observer to remark, "There are greater number of windmills here than I supposed were in existence in the whole country."⁵⁶ Although windmills had been built in Virginia since 1621,⁵⁷ mills of all kinds were extremely scarce in colonial North Carolina,⁵⁸ and the first windmill on the Banks may have been the one constructed by Blount and Wallace in the 1790's, probably at Portsmouth.⁵⁹ The mills on the Banks were used to grind corn, most of which was obtained on the mainland in trade for salted mullet and yaupon. One wonders how such a large number of mills could be supported, particularly when some small settlements had two or more. Most of the mills on the Banks fell into disuse by the end of the 19th century, but at least one remained in use in the first few years of this century.⁶⁰

Yaupon tea drinking had always been a distinctive, though not exclusive, Banks trait, and the gathering of yaupon was an important sideline for a few people.⁶¹ In the 1860 census there was one man listed as a "yappan manufacturer", but it was generally not a full-time occupation.⁶² As a substitute for the imported tea, yaupon gained great popularity during the Civil War and was taken up even by people in the Piedmont, but its use declined sharply after the war, and today there are probably no regular drinkers of yaupon tea, even on the Banks.⁶³ Its decline may have been accelerated by stigmas attached to



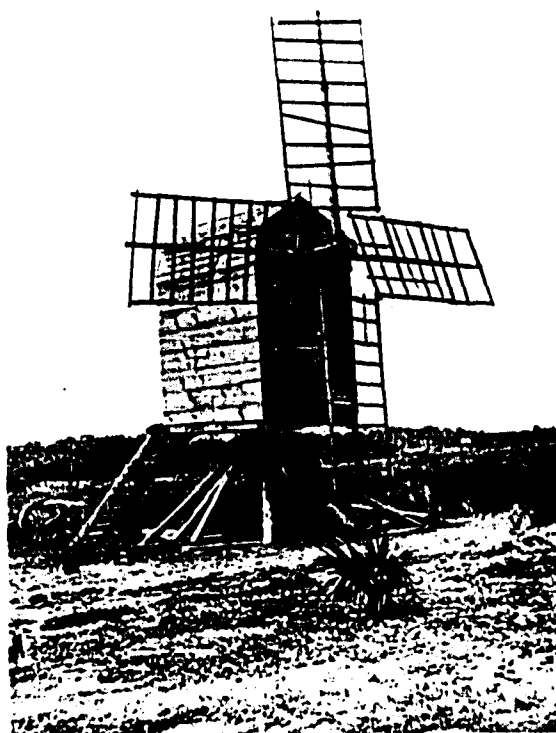


Fig. 2

WINDMILL AT BUXTON

Picture taken between 1900 and 1903

--Photograph by H. H. Brimley,
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of the N. C. State Museum,
Harry Davis, Director

gathering occupations and the use of a home-produced tea.⁶⁴

Waterfowl hunting was a part-time occupation and diversion for many Bankers. Waterfowl provided a welcome change in the diet, and presumably some were sold in the coastal towns. Currituck Sound had the greatest waterfowl population, and, in the last part of the Federal Period, there were a few full-time market hunters there in the winter.⁶⁵ It has been said that the closing of Currituck Inlet resulted in profound changes in the vegetation of the Sound and a consequent great increase in the waterfowl population.⁶⁶ However, it may be that the increase was not so great, and that the closing of the inlet just coincided with the beginning of waterfowl exploitation on the Atlantic Seaboard.⁶⁷ Northern sportsmen were beginning to invade the Chesapeake, and, in the 1850's, a few came to Currituck Sound.⁶⁸ The opening of the Albemarle and Chesapeake Canal has been credited with "introducing" the Sound to the outside world.⁶⁹ The period of great exploitation of waterfowl in Currituck Sound by market hunters and sportsmen was to follow the Civil War.

Fishing was the most prominent occupation among the Bankers and was continually growing in importance.⁷⁰ Bankers had always caught fish for their own use and possibly a little for sale in the coastal towns, but fishing for market was not really important until the 19th century. Commercial fishing in North Carolina began in the late colonial period. A French traveler in 1765 mentioned the catching and salting of fish, particularly the anadromous shad and alewives, in the rivers for shipment to the West Indies,⁷¹ and presumably commercial fishing in North Carolina was just then evolving. In the early



Fig. 3

YAUPON CHOPPING TROUGH

Note the twigging knife sticking in the top of the nearest corner post. Bushes are brought to this trough, and the small twigs and leaves attached are lopped off with the knife. Then the operator chops with his ax until the twigs are reduced to one or two inches in length. The trough is twelve feet long by two feet wide by nine inches deep. Photograph taken by H. H. Brimley about 1903. See H. H. Brimley, "Yaupon Factory," The State, vol. 23, no. 15 (Dec. 17, 1955), 9-11.

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Fig. 4

HOGSHEAD FOR "SWEATING" YAUPON

This "hogshead" is a hollow cypress log with an inside diameter of about 3 1/2 feet. It is about 5 feet deep and is half buried in the ground. Hot stones are taken from the fire and lifted into the hogshead by means of the rock hook (shown lying on the hogshead). A layer of stones is placed in the bottom. On top of these is quickly placed a thick layer of yaupon from the chopping trough. The hogshead is then filled with alternate layers of hot stones and yaupon and is then tightly covered. After 36 hours the cover is removed and the yaupon is spread on an elevated platform to dry out thoroughly. When dried, it is shovelled into sacks and barrels and stored. Photograph taken by H. H. Brimley about 1903. See "Yaupon Factory."

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Harry Davis, Director

days the sound waters were considered "too rough" for fishing, and fishing on the open waters of Albemarle Sound apparently did not begin until about 1814.⁷² Prior to 1815 the river fisheries were mostly conducted with weirs and small seines, but in that year two northern fishermen introduced long haul seines into Albemarle Sound.⁷³ The long haul seine fishery for shad and alewives in Albemarle Sound grew to great size before the Civil War, and some excellent descriptions are available from the 1850's.⁷⁴ Some Roanoke Islanders participated in this Albemarle fishery, but for the most part the Bankers were only involved in individual operations, using their own small boats and modest gear. The Bankers conducted their fishing on the sound margins or near the inlets. "Outside" or ocean fishing before the Civil War was largely confined to the shore fishery for bluefish which began in 1842.⁷⁵ In fishing for home consumption the Bankers did not show too great a regard for species, catching even menhaden for eating purposes.⁷⁶ Their knowledge of fish habits and migrations was slow in developing until fishing for market made them more keenly aware of such matters. Commercial fishing also brought more efficient methods and improved gear and boats. The great changes were to come immediately after the Civil War.

Among the natural "resources" of the Banks which provided some Bankers with employment were the sea-side location and scenery. Beginning perhaps in the late colonial period, low-country planters and town-dwellers brought their families to Ocracoke and Nags Head in summer to escape the "miasma." As part of the attraction to these summer visitors, the barren

sandy wastes on the Banks then became an asset. It was not just by chance that Nags Head and Ocracoke, of all the settlements on the Banks, succeeded in attracting tourists; they best satisfied the criteria of accessibility and location on a narrow part of the Banks.

In 1795 Price said of Ocracoke, "This healthy spot is . . . the resort of many of the inhabitants of the main."⁷⁷ Ocracoke attracted people from New Bern and Washington, while the visitors to Nags Head were largely from the plantations and towns around Albemarle Sound. Those who went to Ocracoke would stay in private homes or in the hotel which was later constructed, but according to Creeoy, the summer visitors began to erect small cottages at Nags Head about 1830.⁷⁸ These cottages were at first all on the sound side, in or near the wooded area. Franklin's map of 1851 shows a "bathing house" on the ocean side,⁷⁹ and apparently the first beach cottage was built in 1855.⁸⁰ When it was seen that this pioneer cottage weathered the storms sufficiently well, others began to spring up around it. Beach cottages naturally facilitated sea-bathing, which was Nags Head's prime attraction, while the on-shore breeze kept the beach area free of mosquitoes. By 1860 Nags Head was a very popular resort, far surpassing Ocracoke, perhaps partly because of the fact that at Ocracoke there were no summer cottages built, either in the wooded area of the village or on the beach. Ocracoke's accessibility declined as use of the inlet lessened. One observer said in 1849 concerning Nags Head: "Of the five or six hundred visitors a greater or less number of them are on the beach or bathing at all hours of the

day."⁸¹ By that time Nags Head offered a great many attractions to vacationists, including foxhunting and a bowling alley.⁸² The advent of summer visitors not only provided employment for some Bankers but also considerably enhanced land values.

Of the two wars of the period, the War of 1812 and the Civil War, only the latter wrought great changes. During the War of 1812 the enemy made only one brief visit to the Banks. The British blockaded the Chesapeake but again could not maintain a sustained siege on the North Carolina coast. Ocracoke Inlet became a harbor for privateers and also served as the entrance into the sounds for vessels supplying Norfolk by "the back door." For several months North Carolinians had been expecting the British to attack Ocracoke, when suddenly, on July 11, 1813, a British fleet under Admiral Cockburn appeared at the inlet.⁸³ Cockburn intended to seize all vessels in the inlet and proceed at once to capture New Bern. Fortunately, although two privateers were taken, an American revenue cutter escaped and warned New Bern. Hope of surprising the city gone, the British proceeded no further than Ocracoke Inlet. After collecting some cattle and sheep from the Banks, Cockburn departed, and North Carolina's brief personal participation in the war was over.

In the Civil War the Union forces invaded the Banks in the early part of the war and remained in occupation throughout. When the war began, the Confederates seized the coastal forts and began to construct defenses at Ocracoke Inlet, at Hatteras Inlet, and on Roanoke Island. On Beacon Island, within Ocracoke Inlet, Fort Ocracoke was built; forts Hatteras and Clark were

constructed on the north side of Hatteras Inlet; on Roanoke Island forts Huger, Blanchard, and Bartow were erected on the western side of the island; and Fort Forrest was placed at Manns Harbor, across Croatan Sound from Roanoke Island.⁸⁴ Confederate privateers and a few small steamers of the North Carolina Navy made their base at Hatteras and proceeded to capture vessels bound for northern ports from late June to August, 1861.⁸⁵

It was to destroy the forts at Hatteras Inlet and to prepare for the obstruction of the inlet channels that a Union force under Flag Officer Silas H. Stringham and Maj. Gen. B. F. Butler was dispatched in late August, 1861. The battle, which consisted mostly of bombardment of the forts by the Union vessels, began on August 28th and ended the next day, a surprisingly easy Union victory.⁸⁶ Butler quickly decided that it would be advantageous to the Federal Government to keep a force at the inlet and to maintain the forts and channels. He agreed with the Confederate engineer who had written, "This inlet is the key to Albemarle Sound."⁸⁷ Thus the original plans were dropped, and a Union force was garrisoned at the inlet.

Upon the fall of Hatteras, the Confederates immediately abandoned Fort Ocracoke on Beacon Island and Camp Washington at Portsmouth. When it was learned that the Confederates were removing cannon from Fort Ocracoke, a Union force went down on September 16th and promptly destroyed the installations at the fort and the few guns which were found on the beach at Portsmouth.⁸⁸

It was early proposed that obstructions be placed in

the channels in Oregon, New, Loggerhead, and Ocracoke inlets to render them useless for navigation. However, those who were sent to make observations to determine the feasibility of such plans doubted that any obstructions would be effective more than just temporarily. A Navy lieutenant reported:

It requires but a brief observation and knowledge of these inlets, with their swift and irregular currents rushing to the ocean, to convince the most skeptical that attempt to close them by sunken obstructions is warring against nature . . . Everywhere the bottom sands are alive and creeping; in a few days, or weeks at most, the current . . . surely washes a channel elsewhere. I therefore think it is impossible to block up any of these inlets for any practicable end or definite results.⁸⁹

Either ignoring or testing these caveats, three schooners were sunk in Ocracoke Inlet on November 14, 1861. "The vessels are chained together, bow and stern, and for the present seriously impede navigation."⁹⁰ The efficacy of this obstruction was never made known, because the Confederates did not try to use the inlet during the few months before the Federals took over all of the area around the sounds.

It would have been extremely easy for the Union forces to follow through immediately and capture all of the sound ports, but the Army chiefs were slow to see this opportunity. Meanwhile the soldiers at Hatteras Inlet were apprehensive of attack from the Confederates based on Roanoke Island. The Confederates, for their part, were equally apprehensive, and thus, except for a skirmish at Chicamacomico on October 4th when the Confederates routed the 20th Indiana but then withdrew, there was no fighting during the remainder of 1861.⁹¹

Although the Federals were supplied by ship, they were ordered to assess the island's resources. Lt. Farquhar reported

to Gen. Wool: "With reference to the subsistence the country affords, I would report that there are many beeves, hogs, and sheep on the island."⁹² That the Union soldiers readily availed themselves of islanders' belongings is shown by Farquhar's further statement that "all the inhabitants that I conversed with unite in complaining of the vandalism of our troops, some houses being completely rifled."⁹³ Largely in a desire to stem further vandalism and to be left alone as much as possible, and partly because of the wish of a few opportunists among them to curry the favor of the invaders, the citizens of Hatteras at least outwardly professed Union sentiment and declared that they had never favored North Carolina's secession.⁹⁴

On October 12, 1861, 111 Hatteras citizens, led by the Rev. Marble Nash Taylor, adopted a "Statement of Grievances and a Declaration of Independence," in which they proclaimed their loyalty to the United States. Taylor went to New York early the next month to elicit aid for the Bankers, who, he said, had "flocked to take the oath of allegiance; and this had cut them off from their scanty resources of traffic with the interior."⁹⁵ Duyckinck records that as a result of Taylor's plea:

. . . a large sum of money was contributed by the City of New York for the distressed Carolinians, and expended in various articles of necessity, which were in good time transported to Hatteras Island. By the time they reached there, however, a profitable employment had been afforded to the natives by the soldiers, which relieved the wants of the people, so that a considerable portion of the produce sent for charity was sold and the money returned to the New York Committee.⁹⁶

On the 18th of November, a North Carolina Provisional Government was established by the Bankers at the so-called "Hatteras Convention," in which forty-five counties were

represented by delegates and authorized proxies."⁹⁷ Taylor was appointed Provisional Governor, and Charles Foster was elected to the national House of Representatives, but when Foster presented himself in Washington in December, he was rejected by Congress on the grounds that the Hatteras elections were unauthorized and invalid.⁹⁸

It was finally decided that the rest of the area around the sounds should be taken, beginning with the capture of Roanoke Island. A large force under General Burnside was amassed, and, to transport them to and through Hatteras Inlet and Pamlico and Croatan sounds, a motley flotilla of shallow-draft vessels was gathered. A contemporary described the fleet thusly:

On the 11th of January, 1862, a vast fleet of gunboats and transports was assembled at Hampton Roads, Old Point Comfort, for a secret expedition. Spectators on the shore counted one hundred and twenty-five boats of all sizes and patterns . . . There was one queer stern-wheeled craft . . . It had come from the shoal waters of the Kennebec. ⁹⁹ Its draught was so light that they insisted . . . it could run wherever there was a heavy dew.⁹⁹

After arriving at the inlet, there was much delay in getting the vessels inside. Flag Officer Goldsborough reported, "The channel way of this bulkhead is shallow, narrow, and tortuous . . . It was only by the greatest exertions . . . that our vessels of the heaviest draft (some of them drawing quite 8 feet) were worried through this perplexing gut."¹⁰⁰ The Union forces paused a few weeks at Hatteras and then advanced on Roanoke Island. Bombardment of the island was begun on the 7th of February, and troops were landed the next day. The Confederates, poorly equipped and greatly outnumbered, soon realized the worthlessness of their "incomplete and badly placed

new forts" and surrendered the same day, the 8th.¹⁰¹ After further expeditions to Elizabeth City and New Bern, the Union forces gained complete control of the sounds and maintained this control throughout the remainder of the war.

Many Negroes flocked to the Union camps after these victories around the sounds. On March 30, 1862, Gen. Burnside appointed Vincent Collyer as Superintendent of the Poor, and it was Collyer's duty to organize and employ these Contrabands, first in the erection of earthwork forts at Roanoke Island, New Bern, and Washington.¹⁰² The group on Roanoke Island grew to quite large size, and in 1863 Chaplain Horace James, Superintendent of Blacks for the District of North Carolina, was sent there to "take possession of all unoccupied lands on the island, and lay them out, and assign them, according to his own discretion, to the families of colored soldiers, to invalids, and other Blacks in the employ of the Government, giving them full possession of the same, until annulled by the Government or by due process of United States law."¹⁰³ James stated that "the upper, or northern, end of the island was laid out in acre lots, and at once assigned to families" and that "within a period of about twelve months, the settlers have built five hundred and ninety one (591) houses."¹⁰⁴ He said further, "It was never intended to give these people farms at Roanoke, but only a homestead, and a garden spot for each family. There were sufficient reasons for this, in that the island is not large enough to divide into farms for any considerable number of people."¹⁰⁵ The able-bodied Negro men were taken for military service, and despite James' attempts

to assist the rest and to teach them trades and skills, the majority were supported at Government expense. James erected a sawmill, promoted fishing, shingle-making, and boat-building, tried to teach cooperage and shoemaking, and even "had a quantity of osier willow slips planted on Roanoke."¹⁰⁶ In January, 1864, there were 2,712 Contrabands on Roanoke, and one year later they numbered 3,091.¹⁰⁷ Most of these refugee Negroes left the island after the war, but a few settled there permanently.¹⁰⁸ The land appropriated for their use was apparently returned to the rightful owners, and today one would look in vain for traces of James' large settlement. If this Contraband colony had remained on Roanoke much longer and if some of James' introductions had taken hold, the landscape of the island might be vastly different today, but the colony was an exotic element which seemingly has left no traces.¹⁰⁹

The less than 100 Negroes at Hatteras during the war were employed either "by the quartermaster to man the boats which put out to passing vessels . . . [or as] servants of officers at the fort."¹¹⁰ Their camp consisted of twelve small building units at Fort Clark.¹¹¹ Presumably this group was taken to the mainland right after the war.

By the end of the Federal Period, some of the settlements on the Banks had changed quite considerably. It was noted that at the end of the colonial era Portsmouth was the largest settlement on the Banks, followed quite closely by Ocracoke. Portsmouth attained its greatest population just before the Civil War, but it had been surpassed by Ocracoke in the 1830 census, and Ocracoke has been the more important ever since.

Of the two good channels within Ocracoke Inlet the better one at first was Wallace's Channel which took ships close to Portsmouth and past Shell Castle, but this channel shoaled between 1810 and 1820, and the channel which was situated close to Ocracoke then began to carry the greatest part of the commerce. Portsmouth itself has never offered harbors; Ocracoke has had the fairly deep Teaches Hole in which ships could anchor close to the village. Furthermore, even though Ocracoke Inlet does not show the rapid changes of the inlets north of the Cape, there is still an advantage to a position on the north, rather than the south, side of this inlet. Portsmouth's and Ocracoke's populations declined immediately after the Civil War but only because of the loss of their former slave element; the white populations remained about the same. After 1870 Ocracoke's population began to grow again, but Portsmouth's commenced a steady decline.

The interesting little establishment at Shell Castle was born in 1790 and died rather abruptly in the second decade of the 19th century. In 1800 the population of Shell Castle was 25, of which 15 were slaves.¹¹² In the next census the number of residents of Shell Castle was 40, of which 22 were slaves.¹¹³ The life of the Shell Castle enterprise depended entirely upon the commerce which went through Ocracoke Inlet by way of Wallace's Channel. On the island Blount and Wallace had erected houses, docks, a tavern, warehouse, grist mill, and ship chandler's store. They also provided lighterage and promoted a porpoise fishery.¹¹⁴

The opening of Hatteras Inlet naturally gave a rapid

growth to the little settlement of Hatteras, and this village became the largest settlement, by far, on the island. Too, the village of Hatteras, being concerned in great part with the commerce of the inlet, offered a greater variety of services than any other settlement on Hatteras Island.

There were no great changes in the other settlements on the Banks and Roanoke Island. All were growing slowly, the result simply of normal expansion of families in situ. The most notable change which occurred as a result of the Civil War was a loss of most of the Negro inhabitants on the Outer Banks. The colored population of Roanoke Island, however, increased, showing that some of the Contraband colony took up land there.¹¹⁵



Fig. 5

SHELL CASTLE

The detail from a pitcher in
the Blount Collection, The Hall
of History, Raleigh.

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courtesy of the North
Carolina State Department
of Archives and History

NOTES

1. A. C. Brown, "The Dismal Swamp Canal," American Neptune, vol. 5, no. 3 (July, 1945), 212, 220. See also C. R. Hinshaw, Jr., "North Carolina Canals before 1860," NCHR, vol. 25, no. 1 (January, 1948), 15-23.
2. T. J. Wertenbaker, Norfolk: Historic Southern Port (Durham: Duke University Press, 1931), 31-32.
3. Ibid., 203; Hinshaw, op. cit., 31-32; E. Ruffin, Agricultural, Geological, and Descriptive Sketches of Lower North Carolina, and the Similar Adjacent Lands (Raleigh: Institution for the Deaf & Dumb & the Blind, 1861), 119.
4. Brown, "The Dismal Swamp Canal," American Neptune, vol. 5, no. 4 (October, 1945), 310; Wertenbaker, op. cit., 203; Hinshaw, op. cit., 45-52.
5. Hinshaw, op. cit., 8-15; Tatham, op. cit., 25; W. H. Hoyt, ed., The Papers of Archibald D. Murphey, vol. 2 (Raleigh: E. M. Uzzell & Co., 1914), 23; Report of the Secretary of War, vol. 2, part 2 (Washington: GPO, 1890), 1127.
6. Lefler and Newsome, op. cit., 361. See the map on p. 378 of Lefler and Newsome showing roads and railroads in North Carolina in 1860.
7. The date for the final closing of Roanoke Inlet varies from 1795 to 1819. The 1795 date can be found on W. C. Kerr's "Map of North Carolina," 1882, in the Map Division of the Library of Congress. A date of 1806 was given by T. Williams, "The Surroundings and Site of Raleigh's Colony," American Historical Association, Annual Report, 1895, 52. W. B. Franklin, "Report to Colonel J. J. Abert, Chief of the Corps of Topographical Engineers, U. S. Army, August 23, 1852" (National Archives, RG 77: Records of the Corps of Engineers), 4, states that Roanoke Inlet was closed in 1811. A date commonly given is 1819. See North Carolina Fisheries Commission Board, Special Committee on Inlets, Report of Special Committee on Inlets Which Investigated the Proposal to Construct Certain Additional Inlets on the North Carolina Coast (Morehead City: North Carolina Fisheries Commission Board, 1923), 65. This last publication will be hereafter cited as Additional Inlets.
1811 is the preferred date. Tatham's "Rough Hydrographick Map of the N:Carolina Junction Canals," 1807 (MS file, Map Division, Library of Congress), a result of his 1806 survey,

shows Roanoke Inlet as open. Thus, 1806. is too early a date for the closing of the inlet. 1819 is too late a date because A. D. Murphey in December, 1815, alluded to the closing of the inlet. See Hoyt, op. cit., vol. 2, 23, and also a more definite statement in 1816 on p. 36. Walter Gwynn in 1840 stated that the inlet "finally filled up about thirty years ago." W. Gwynn, Documents Relating to the Opening of an Inlet at or near Nag's Head, on the Coast of North Carolina, 26th Congress, 1st session, Senate Documents, 603, July 11, 1840, p. 2.

As Roanoke Inlet shoaled more and more, Croatan Sound was forced to receive more of the flow from Albemarle Sound. This increased flow, together with the normal erosion in the sound and the slow rise in level of the sea and sounds, resulted in the gradual removal of the marsh islands in the lower part of Croatan Sound.

There is a legend, even now heard, that in the time of the informant's youth, one could walk from Wanchese to the mainland across the Roanoke Marshes, but that it was necessary to carry a fence rail in order to cross the one narrow gut or slough through the marsh. This story has considerable antiquity, however. Gwynn, op. cit., 3, said (1840), "In the memory of the last generation, there was a mere gut between the marshes through the eastern channel, narrow enough to be crossed on a fence rail." W. B. Franklin in 1852 interviewed one Adam Etheridge who "remembered passing through Roanoke marshes in a boat in the year 1783. There was then but one channel or opening through them, and that was not more than sixty feet wide. His grandfather used to say that when he was a boy the opening was so narrow that it could be crossed on a fence-rail" (Franklin, op. cit., 4).

8. SR, vol. 24, 931; Hinshaw, op. cit., 5-6.
9. Hoyt, op. cit., vol. 2, 23.
10. Ibid., vol. 1, 141.
11. Report of the Secretary of War, vol. 2 (Washington: GPO, 1871), Appendix Q 14, 655-662; Hoyt, op. cit., vol. 2, 113; Gwynn, op. cit.; Hinshaw, op. cit., 5-6.
12. Lt. Col. Turnbull reported on September 1, 1857 to Col. Abert, "Congress appropriated \$50,000 to commence operations; \$40,000 have been expended, and at this time there is scarcely a trace of what has been done, the drifting sand filling in the trench as fast as it was excavated by the dredging machine. In fact, the machine was very near being imbedded in the sand, it filling up so rapidly behind it, but was gotten out in time to save it" (Report of the Secretary of War, vol. 2 (Washington: GPO, 1871), 659). Also see Ruffin, op. cit., 120.
13. Ruffin, op. cit., 116; Williams, op. cit., 51n; Ansell,

op. cit., vol. 1, 120, 124; G. R. Weiland, "Currituck Sound, Virginia and North Carolina - A Region of Environmental Change," American Journal of Science, 4th ser., vol. 4, no. 19 (July, 1897), 76.

This inlet may have temporarily cut out again as so often happens with inlets, in 1842, but it did not remain open long. See New York Shipping and Commercial List, July 30, 1842 (Notes of John L. Lochhead, The Mariners Museum).

Diversion of drainage by the Dismal Swamp Canal is said to have contributed to the closing of Currituck Inlet. A. C. Brown, op. cit., 303; Ansell, op. cit., vol. 1, 125; W. S. Forrest, Historical and Descriptive Sketches of Norfolk and Vicinity (Philadelphia: Lindsay and Blakiston, 1853), 467. Forrest, p. 468, said, "Some of the superstitious residents of the country regarded the whole affair as a visitation of Providence, or, in other words, a judgment upon the people, for the fisheries are said to have often presented scenes of extraordinary debauchery and immorality." See Ansell, op. cit., vol. 1, 124, for a description of the carousing at the groggery at Betsy's Marsh, "scarcely a hundred yards away from Currituck Inlet."

14. Acts Passed by the General Assembly of the State of North Carolina, at the Session of 1829-30 (Raleigh: Lawrence & Lemay, 1830), 18. Chapter 13, "An act to authorise the President and Directors of the Board of Internal Improvements to contract for the re-opening and improving Currituck Inlet."

15. Currituck Inlet was the last inlet to connect Currituck Sound with the sea.

Formerly there had also been a small, commercially unimportant inlet named "Carthys Inlet." This inlet was perhaps first shown on the Price and Strother map. "Survey of the Sea Coast and Inland Navigation from Cape Henry to Cape Roman," 1798, a copy of which is in the Map Division of the Library of Congress. This is now referred to as "Caffey," "Caffeys," or "Caffee" Inlet. See Powell's Point topographic sheet, AMS 1/50,000, 1948. The date of closing of Carthys Inlet is commonly given as 1800, as by Williams, op. cit., 52, but W. B. Franklin, op. cit., 7, said that it closed in 1811. This inlet appears as "South Inlet" on H. S. Tanner's "The Travellers Pocket Map of North Carolina," 1830, and "A New Map of Nth. Carolina," 1833, copies of which are in the Map Division of the Library of Congress. This is probably an example of cartographic perpetuation of a feature no longer in existence. It must be kept constantly in mind while studying the maps of this area that map makers were interested and informed only on the existence of navigable and useful inlets; the closing of an inlet such as Carthys might not be made known to them for several years.

The freshening of the sound waters after the closing of Currituck Inlet meant the demise of oystering in the sound. Forrest, op. cit., 467, said that before the closing of the inlet the sound was "said to have been quite as celebrated,

also, for superior maritime productions as Lynnhaven." Weiland, op. cit., 77, said, "Previously the sound had been a valuable oyster bed. Within a few years the oysters had all died out." E. C. Bruce, op. cit., 759, mentioned "Currituck oysters, once famous."

Previously salt-water species of fish inhabited the sound. Forrest, op. cit., 467, said that the shores of the sound were "very remarkable for extensive fishing operations; and, during the fishing season, presented scenes of great activity." Fishing was apparently greatest right at the inlet. Ansell, op. cit., vol. 1, 124, said that people from the Currituck mainland--from Coinjock, Indian Ridge, etc.--"came to this inlet with innumerable seines to catch fish, to salt up, and to sell, to the people in back Currituck." With the freshening of the sound the salt-water fish disappeared, and fresh-water fish took their place. This required some adjustments by the fishermen, who then had to get used to new fish, new fishing grounds, and probably new fishing seasons and gear.

16. One might infer from the name "New" that the old "Chickinocominock" (various spellings) Inlet had closed at least temporarily before 1798. Between 1828 and 1846 New Inlet was the northernmost inlet on the North Carolina coast.
17. Hoyt, op. cit., vol. 2, 39.
18. Ibid., 125-126.
19. See notes 5 and 11 above.
20. Acts Passed by the General Assembly of the State of North-Carolina, at the Session of 1827-28 (Raleigh: Lawrence & Lemay, 1828), 8, Chapter 5.
21. The "Swash" was the "inner bar," the place of least depth in the channel which is used by navigation, obviously a very critical point. The depth of water on the swash is the governing depth for ships which want to pass entirely through the inlet. This term was used also at Hatteras Inlet. "Bulk-head" was sometimes used synonymously with "swash."
22. It can be seen that all private projects to construct canals or to improve inlets were either abortive or else not properly backed or maintained. See notes 1 to 5 on canals and 14 on Currituck Inlet. The only agency large enough to make the proper surveys and to stand the costs of construction and maintenance was the U. S. Government.
23. See the following maps, all in the National Archives, Cartographic Records Branch, RG 77: Records of the Corps of Engineers: 1821, "Plan of Ocracock Inlet: N. C.," Flat H-9 (National Archives designation); 1827, "Survey Shewing the Obstructions to the Navigation at Ocracoke Inlet N. C.,"

Flat H-15; 1830, "Map of Ocracock Inlet," U. S. Portfolio Sheet 47; and 1835, "A Map of Ocracock Inlet," Flat H-241.

24. Report of the Secretary of War, vol. 2, part 2 (Washington: GPO, 1893), Appendix L 5, 1360-1361.
25. Welch, op. cit., 42, quotes a Hatteras pilot, Redding R. Quidley, as saying in 1884, "There has been but very little passing through Ocracoke Inlet since 1855." There is a noticeable lack of mention of Ocracoke Inlet in the last part of the Federal Period.
26. Welch, op. cit., 40. Cobb, "Some Changes," 11. J. W. Rolinson, "John W. Rolinson Book, Cape Hatteras, 1846-1905," Unpagged MS volume, Microfilm in Southern Historical Collection, /10, 15/. Franklin, op. cit., 7. Annual Report of the Superintendent of the Coast Survey, 1847, Appendix 13, pp. 76-77. Welch is the best source on the opening of Hatteras Inlet, and the USCS Report is best for Oregon Inlet.

There are some elderly Hatteras residents today who can relate rather fully the story of the opening of Hatteras Inlet, which was witnessed by their grandparents. One lady told the writer that she knows the date of the opening of the inlet, 1846, because her father, born in 1845, was then one year old, and she recalls her grandparents' story that in fleeing for higher ground during the storm, they were afraid that the infant might not survive.

The first vessel to pass through Hatteras Inlet was the schooner Asher C. Havens, February 5, 1847. Welch, op. cit., 40. Rolinson, op. cit., /112/. The first vessel to pass through Oregon Inlet was the small steamboat Oregon in 1848, which gave the inlet its name. Cobb, "Some Changes," 12. Annual Report of the Superintendent of the Coast Survey, 1848, 43.

Possibly Loggerhead Inlet was opened at this same time. Little is known about this inlet, which was never used commercially. It was so close to New Inlet that for the purposes of this dissertation it shall be considered in the New Inlet inlet area.

27. Ruffin, writing about 1856, said that Oregon Inlet "has been passed through only by a small steamer of very shallow draft" (Ruffin, op. cit., 123).
Oregon was afflicted by a shallow inner bar and tortuous channels. See Report of the Secretary of War, vol. 2, part 2 (Washington: GPO, 1874), Appendix U 23, pp. 84-85.
28. Rolinson, op. cit., /58-59, 72-85/, gives numbers, class, cargo, origin, and destination of ships entering the port of Hatteras between January 1, 1859, and July 1, 1861. All were schooners from the West Indies carrying such items as sugar, molasses, salt, and bay rum. They were bound for Elizabeth City, Edenton, New Bern, Washington, or Plymouth. In 1859, 56 schooners came in, in 1860, 49, and in the first six months of 1861, 15 (14 of which were in the first three

months). Presumably these vessels also went out through Hatteras Inlet. The number of coastwise craft which used the inlet during this time and which did not have to be cleared at the port is not known, but it must have been much greater than the West Indian schooners.

29. 1850 (7th) Census, North Carolina, Vol. 3, Carteret County, 217-226; vol. 8, Hyde County, 785-809.
30. 1860 (8th) Census, North Carolina, Vol. 3, Carteret County, 46-55; Vol. 9, Hyde County, 193-236.
 The Hatteras figures include all of Hatteras Island with no indication of specific locations, but it is assumed that all the persons designated as pilots on Hatteras Island served Hatteras Inlet.
 The 1870 census showed 16 pilots at Ocracoke Inlet and only 9 at Hatteras, but the 1880 census showed 26 pilots at Hatteras Inlet and none at Ocracoke. Unfortunately, the 1890 population schedules have burned, and only the numbers of people and neither occupations nor any other information are available. In 1900 there were 2 pilots at Ocracoke Inlet and none at Hatteras. Used roughly these figures show the relative importance of the two inlets and also the decline in use of the inlets.
31. Comparison of names of pilots in the above censuses indicates that a few moved from Ocracoke Inlet to Hatteras Inlet in the 1850's. Also see Welch, op. cit., 40-42.
32. SR, vol. 25, 54. Crittenden, op. cit., 5.
33. Shell Castle is a low shell island near Beacon Island within Ocracoke Inlet. Before 1790 it was called "Shell Island," but received the grander name when John Gray Blount of Washington, N. C., and John Wallace of Portsmouth built a large trading establishment there. More will be said about this establishment later. Wallace lived on the island and was dubbed "Governor" because he was governor of the "Castle."
 Price in 1795 described the island thusly, ". . . Shell Castle, built on a rock of oyster shells, half a mile in length and about sixty feet in width, dry at low water" (Price, op. cit., 629). The name "Shell Castle" referred not only to the Blount and Wallace establishment but to the island as well.
34. D. L. Corbitt, ed., "Historical Notes. Bids to Be Received to Build a Light House near Ocracoke Inlet," NCHR, vol. 4, no. 3 (July, 1927), 323-324.
35. U. S. Light-House Establishment, Compilation of Public Documents and Extracts from Reports and Papers Relating to Light-Houses, &c. 1789 to 1871 (Washington: GPO, 1871), 314.
36. Loc. cit.

37. "Clipping File - Cape Hatteras, N. C.," and "Clipping File - Body's Island, N. C.," National Archives, RG 26: Records of the United States Coast Guard.
The Bodie Island Light was moved in 1872 to a new position north of the inlet. "As it was found that Oregon Inlet was gradually working southward so that the site of the old tower which was at one time a considerable distance from the inlet was at the time of the examination only about four hundred yards from it, a new site was selected on the north side (See L.H.B. Report, 1871). The new site is 1 1/2 naut. miles north of Oregon Inlet (1871) 3/4 mile from the Atlantic and 3/8 mile from Roanoke Sound" "Body's Island. New Structure," p. 1, Undated MS (c1872) in "Clipping File - Body's Island, N. C." This is dramatic evidence of the fairly rapid southward migration of inlets north of Cape Hatteras. Hatteras and Ocracoke inlets, being on a coastline which trends in a different direction, do not show these rapid changes.
38. For a comprehensive treatment of the wrecks of all periods of North Carolina history see David Stick, Graveyard of the Atlantic (Chapel Hill: University of North Carolina Press, 1952).
39. H. Williamson, The History of North Carolina, vol. 2 (Philadelphia: Thomas Dobson, 1812), 279-280. D. B. Warden, A Statistical, Political, and Historical Account of the United States of America, vol. 2 (Edinburgh: Archibald Constable and Co., 1819), 373-374.
40. This act was first passed in 1800 as "An Act Concerning Wrecks" but was repealed in 1801, and a new act entitled "An Act to Amend an Act, Entitled 'An Act Concerning Wrecks,'" Passed the Last Session of the General Assembly" was then passed. See F. X. Martin, The Public Acts of the General Assembly of North-Carolina (New Bern: Martin and Ogden, 1804), 158, 183-185. Martin only printed the 1800 act by title, but he gave the full provision of the 1801 act.
North Carolina, whose stretch of coast was the most dangerous on the Atlantic seaboard, was a little late in providing official service to wrecked ships. Virginia established the office of Commissioner of Wrecks in 1782, and in 1799 the Maryland Assembly passed an act appointing a wreck master in Worcester County. See Marye, op. cit., 112-113.
41. Martin, Public Acts, 183-185. These provisions were modified many times but not importantly in the 19th century. Most of the amendments dealt with the changing of the boundaries of the wreck districts, with the nature of the appointment of wreck masters, and with the size of the bond posted by these wreck masters. The laws regarding wreck masters, wreck districts, and vendues are still on the books. See The General Statutes of North Carolina, vol. 2B (Charlottesville Va.: The Michie Company, Law Publishers, 1950), 856-859.

There are also current provisions regarding pilotage at the inlets; but these are equally obsolete.

The Rolinson Book has many mentions of vendues: "Notice thar will be sold for cash on Friday the 20 of inst the Schooner Jane of Baltime /Baltimore/ and cargo consisting of Corn this May 4th 1857" (p. 17), "Notice thar will be Sold for cash on Friday the 4 of August at public auction the Schooner B. F Hanks /1856/ (p. 28), cargo of cotton sold in 1899 (p. 103), and vendue of shingles from schooner Loncynth on June 25, 1860 (p. 117).

In these vendues items were sold at extremely low prices, if an old account book which A. W. Drinkwater of Manteo showed the writer is typical. This account book lists the results of some vendues on Bodie Island beach in 1846 and 1847. Examples of the items and prices paid are: 5 bbls. rosin, 31 1/4¢; 2 pine logs, 10¢; 1 lot of rigging, 5¢; 1 main jib, \$4; etc.

Responsibility in assisting helpless vessels passed to the Life Saving Service after the LSS Stations were established in the late 1870's.

42. Thomas H. Blount, lawyer and customs collector of Washington, N. C., on January 6, 1826, wrote to Congressman Richard Hines, "The Inhabitants on Cape Hatteras banks obtain their subsistence entirely by the wrecks cast on shore there - that is by the salvage in saving the cargoes of the unfortunate" (H. T. Shanks, ed., The Papers of Willie Person Mangum, vol. 1 (Raleigh: State Department of Archives and History, 1950), 222), but no similar statements can be found. Other statements regarding the livelihood of the Bankers in this period which include wrecking also mention other sources of income, such as fishing, boating, piloting, hunting, etc.
43. As one writer stated, "The North Banker is neither farmer nor florist . . . His dominion is over the broad waters" (F. Vaughan, Kate Weathers; or Scattered by the Tempest (Philadelphia: J. B. Lippincott & Co., 1878), 14. Vaughan on p. 6 defined the North Banks as "the continuation of the coast from Nagshead northward." When the term "North Banks" appeared in censuses, it referred to the Banks north of Hatteras Island.
44. The occupation listed in the census for a particular individual might have depended upon the time of the year or even the time of the day when the census enumerator called. In the old censuses it is difficult to separate "fisherman," "mariner," "boatman," "seaman," "sailor," and "laborer." The 1850 and 1860 censuses for Hatteras Island illustrate this very well. In each census the total number of job-holders was about the same, but as the following table will show, the same jobs were classified differently in each census.

	<u>1850</u>	<u>1860</u>
Fisherman	124	6
Mariner	0	218
Boatman	20	0
Seaman	26	1
Laborer	68	0
Etc.		
Total number of jobholders	262	270

1850 (7th) Census, North Carolina, Vol. 8, Hyde County, 772-798. 1860 (8th) Census, North Carolina, Vol. 9, Hyde County, 201-226, 228-236.

45. Price, op. cit., 627. The term "Core Banks" refers to all the Banks between Ocracoke Inlet and Cape Lookout. "Portsmouth Banks" is sometimes used for the northern part of Core Banks. "Portsmouth Island" sometimes refers to the area between Ocracoke Inlet and the next inlet to the south, which at present is Swash (Whalebone) Inlet.
46. A. R. Newsome, ed., "A Miscellany from the Thomas Henderson Letter Book, 1810-1811," NCHR, vol. 6, no. 4 (October, 1929), 401. The writer of this anonymous description of "The Island of Portsmouth" considered the island to be 25 miles long.
47. Welch, op. cit., 41.
48. 1850 (7th) Census, North Carolina, Vol. 3, Carteret County, 217-226; Vol 8, Hyde County, 772-809; Vol. 5, Currituck County, 418-441.
49. 1860 (8th) Census, North Carolina, Vol. 3, Carteret County, 46-55; Vol. 5, roll 2, Currituck County, 102-124; and Vol. 9, Hyde County, 193-236.
50. Ruffin, op. cit., 127-129.
 Gallop lived on Martin Point on Jean Guite ("Guinguy's") Creek. See USC&GS Chart, "Currituck Beach Light to Wimble Shoals," 1942 (7th ed.), revised to 1951. Gallop was a wealthy man and was certainly not typical of the farmers on the Banks. He appears in the 1860 Census (N. C., vol. 5, roll 2, Currituck County, North Banks, p. 103); at that time he had 6 dependents, hired 2 domestics, 1 mechanic, and 1 teacher, and had a very considerable estate. Gallop also owned a ferry which ran from the Banks to Powells Point. See The War of the Rebellion: A Compilation of the Official Records of the Union and Confederate Armies, series 1, vol. 9 (Washington: 1883), 143. Hereafter cited as Armies.
 "Jean Guite" is an interesting name. It appears first on the 1708 Nairne map as "Gingite." Undoubtedly Algonkian, the name might be the same as "Chincoteague," which means "large stream" or "inlet" and which has been spelled in

various ways, including "Gingoteque." See "Chincoteague," Handbook of American Indians, Part 1, 1907, 272. The present Gallicized form, "Jean Guite," is apparently the result of a sophisticated person writing down the name as he heard it. William Tatham's "Rough Hydrographick Map of the N: Carolina Junction Canals," 1807, shows "Jean Guayt Creek." This is the oldest example which could be found of the name in anything like its present form, and possibly the English-born Tatham transcribed the name in this way because of his knowledge of French.

51. 1860 (8th) Census, North Carolina, vol. 9, Hyde County, 203, 208.
52. Newsome, op. cit., 401.
53. Ruffin, op. cit., 127, 130.
54. In places, such as the Eastern Shore of Virginia, where it was possible to have both wind- and watermills in one locality, the latter succeeded at the expense of the former. In 1879 it was said that on the Eastern Shore were "a number of half-ruined and very dilapidated windmills. . . [which] have long since passed the age of usefulness" (H. Pyle, "A Peninsular Canaan," Harper's New Monthly Magazine, vol. 58, no. 348 (May, 1879), 807). Windmills were still flourishing on the Banks at that time.
55. The sources used in compiling this map were as follows:
 1. Portsmouth Mill. This mill is shown on several maps--e. g., "Ocracock Bar including Shell Castle" (L. Furlong, The American Coast Pilot, 6th ed. (Newburyport, Mass.: Edmund M. Blunt, 1809), between pp. 210 and 211); "Plan of Ocracock Inlet: N. C.," 1821 (National Archives, RG 77, Flat H-9); etc.
 2. Ocracoke. The above-mentioned "Plan of Ocracock Inlet: N. C." also shows "Howard's Windmill" on what is still called Windmill Point at Ocracoke. An elderly Ocracoke informant told the writer that in his youth there were three windmills at Ocracoke.
 3. Hatteras. Two windmills in the village of Hatteras are shown on an 1864 map, "Map of Part of Hatteras Island" (National Archives, RG 77, Fortification Files 143-23).
 4. Buxton. USCS Section IV progress sketches show "Jennet's M^{ill}" at Buxton. H. H. Brimley photographed the Buxton mill between 1900 and 1903. See Fig. 2 (photograph in North Carolina State Museum, Raleigh).
 5. Avon. N. H. Bishop in the 1870's mentioned two windmills at Avon (N. H. Bishop, Voyage of the Paper Canoe (Boston: Lee and Shepard, 1878), 178).
 6. Chicamacomico area (Waves and Rodanthe). N. H. Bishop, op. cit., 175, mentioned that the "two Chicamacomico ^{/sic/} settlements" each had a windmill. An elderly Rodanthe informant told the writer that in his youth there was one

mill at Rodanthe and two at Waves.

7. Roanoke Island. The W. B. Franklin map (no title), National Archives, R. G. 77, Roll H-54 no. 2, shows two windmills on Roanoke Island.

8. Kitty Hawk. David Stick has found references in deeds dated 1783 and 1787 to a Mill Point on the northeast side of Kitty Hawk Bay (Letter to the writer, February 24, 1956).

9. Currituck Banks south of Piper Hill. "Baum's W. M." is found on USCS Section IV progress sketches.

The sources of most of the mainland mill locations were USGS and USC&GS maps showing places named "Windmill Point" or "Mill Point." The mills along the western shore of Core Sound were pointed out by A. Taylor, "The Mills of Half a Century Ago," The State, vol. 18, no. 1 (June 3, 1950), 3. Taylor also has a photograph of the mill at Swan Quarter. Collier Cobb photographed the mill on Harkers Island, "Where the Wind Does the Work," National Geographic Magazine, vol. 17, no. 6 (June, 1906), 312.

56. C. Johnson, The Long Roll (East Aurora, N. Y.: The Roycrofters, 1911), 53-54.

57. P. Bruce, op. cit., vol. 2, 487-488. By 1641 there was a windmill on the Eastern Shore. Ames, op. cit., 115. R. T. Whitelaw, Virginia's Eastern Shore, vol. 1 (Richmond: Virginia Historical Society, 1951), 178, mentions the building of a "Wynde Mill" in 1642.

Windmills were early built in the northern colonies. The first windmill in New England was erected at Watertown and moved to Boston in 1632. M. S. Briggs, The Homes of the Pilgrim Fathers in England and America (1620-1685) (London: Oxford University Press, 1932), 140.

The New England mills were apparently mostly tower or smock mills, while the mills of the Chesapeake and of the Dutch and Swedish settlements were post mills. A post mill is one having a body mounted and turning on an upright post. A tower mill has a tower of brick, masonry, or other materials, and a smock mill is a tower mill with a wooden cap. R. Wailes, The English Windmill (London: Routledge and Kegan Paul, Ltd., 1954), 217-218, 220. The post mill is older than the tower mill. The post mill dates from the 12th century, while the first recorded instances of the tower mill are from the late 14th century. R. J. Forbes, Studies in Ancient Technology, vol. 2 (Leiden: E. J. Brill, 1955), 120-121. The post mill is sometimes called the German mill, and the tower and smock mills are occasionally called Dutch mills. However, these names are deceptive; they suggest, but should not, that the types originated in those areas. P. Putnam, "Windmills and Wind Power," Encyclopaedia Britannica, 1955, vol. 23, 647.

Briggs, op. cit., 141, said, "The 'post-mill' is rare in America," but his experience was limited to New England and eastern Long Island. For a picture of a post mill in New Amsterdam in 1656, see "Van der Donck's Map of New

Netherland, 1656, with View of New Amsterdam" (J. F. Jameson, ed., Narratives of New Netherland, 1609-1664 (New York: Charles Scribner's Sons, 1909), between pp. 294 and 295). All of the windmills on the Outer Banks were post mills and were undoubtedly modeled after Chesapeake mills. The mills on the Banks were little changed from their early English ancestors. Wailes' description of early English post mills fits the Banks mills very well: "The early post mills were much lower and smaller and were pushed round by hand to face the wind by means of a tail pole, which protruded through the ladder at the tail of the mill. They were shorter too, because sails were plain frameworks over which sail-cloths were spread, and this operation had to be carried out from the ground" (Wailes, op. cit., 6).

It was once thought that the first European windmills were copied from Near Eastern examples, but R. J. Forbes has shown that European windmills are constructed quite differently from those of the Near East. Forbes says: "The Western windmill may well have been an independent European invention of the twelfth century . . . However, its origin still remains a mystery . . . The internal economy of the post mill is just like that of a water mill, but with the drive turned upside down; i. e., driving down from the sails instead of up from the water wheel. A millwright of the day familiar with the Vitruvian water mill could have devised a windmill of the post mill type . . . it was much more efficient than the eastern mill" (Forbes, op. cit., 117-118).

58. In January, 1700, permission was granted to James Coles of Perquimans County to build a mill at the head of "Indian Crick." CR, vol. 1, 531. This mill, apparently a water-mill, was probably the first mill in the colony, because in 1710 DeGraffenried said that there was "in the whole province, only one wretched watermill; the wealthiest people use handmills, and the poorer class are obliged to pound their grain in mortars made of oak, or rather tree-stocks which are dug out" (CR, vol. 1, 913). Throughout the colonial period there were bills to encourage the building of mills in North Carolina. If, on a man's land, there was a good mill site and the man did not build a mill, then anyone could build a mill there and pay the owner for the land. Watermills required 2 acres and windmills 1/2 acre. CR, vol. 2, 206.
59. A. B. Keith, "Three North Carolina Blount Brothers in Business and Politics, 1783-1812" (Unpublished doctoral thesis, University of North Carolina, 1940), 116.
60. Most of the windmills went out of use very rapidly in the last part of the 19th century. Cobb, "Where the Wind Does the Work," 1906, said, p. 310, "Windmills for grinding corn dot the whole chain of islands, though most of them have now fallen into disuse." However, one does not know when Cobb made this observation. F. A. Olds in an article for

the Charlotte Daily Observer, May 24, 1908, said that the windmills were then no longer used. See newspaper clippings in the North Carolina Collection, University of North Carolina, under "Coast." In an article published in 1905, H. H. Brimley said concerning windmills: "The one at Buxton went down in a blow last October and the only one still in active service is a few miles up the beach at Kinnaheet." H. H. Brimley, A North Carolina Naturalist, H. H. Brimley: Selections from His Writings, ed., by E. P. Odum (Chapel Hill: University of North Carolina Press, 1949), 31.

61. The use of yaupon (*Ilex vomitoria* Ait.), also called cassena or the "Black drink," was popular among the Southeastern Indians, although it may not have been used by the Secotan. See Chapter 2, note 70. Good summaries of the Indian use of yaupon are given by J. R. Swanton, "Religious Beliefs and Medical Practices of the Creek Indians," Bureau of American Ethnology, Forty-Second Annual Report, 1924-1925 (Washington: GPO, 1928), 538-539; F. G. Speck, "Catawba Medicines and Curative Practices," Philadelphia Anthropological Society, Publications, vol. 1, "Twenty-fifth Anniversary Studies," ed. by D. S. Davidson (Philadelphia: University of Pennsylvania Press, 1937), 189, 196; E. M. Hale, "Ilex Cassine, the Aboriginal North American Tea," USDA, Division of Botany, Bulletin, 14, 1891; W. E. Safford, "Narcotic Plants and Stimulants of the Ancient Americans," Smithsonian Institution, Annual Report, 1916 (Washington: GPO, 1917), 416, 418; W. La Barre, "The 'Black Drink' and Other American Emetic Rites," Appendix N (pp. xciii-cii) of "The Peyote Cult," Doctoral thesis, Yale University, 1937; R. E. Schultes, "The Correct Name of the Yaupon," Harvard University Botanical Museum, Leaflets, vol. 14, no. 4 (February 6, 1950), 97-105; and A. H. G. Alston and R. E. Schultes, "Study of Early Specimens and Reports of *Ilex vomitoria*," Rhodora, vol. 53, no. 636 (December, 1951), 273-279. The Timucuan name "cassena" (various spellings) refers to *Ilex vomitoria* Ait. and not *Ilex Cassine* L. Alston and Schultes, op. cit., 279, said, "In none of the old collections and reports which we have examined is there reliable and directly stated evidence that any plant other than *Ilex vomitoria* was the widely employed source of the black drink. Not even the closely allied *Ilex Cassine* L. or dahoon can be pointed to as a possible source."

Lawson, op. cit., 92-93, mentions the use of yaupon by the "Carolina Indians" (no further identification) and by the Spanish in Florida, but he did not say anything about its use by whites in North Carolina. Mark Catesby, in the middle of the 18th century, said that in North Carolina yaupon "is as much in use among the white people as among the Indians, at least among those who inhabit the sea-coasts." See Schultes, op. cit., 99, and Hale, op. cit., 20. It was said that "a few leaves of this plant lessen the injurious influence of saline water" (Hale, op. cit., 11) and Rafinesque stated, "In North Carolina, the inhabitants of the seaside swamps,

having no good water to drink, purify it by boiling it with a little casseena" (Alston and Schultes, op. cit., 278).

That yaupon early became popular in coastal North Carolina is shown by the statement of a German traveler in 1783-1784, "At Edenton we were for the first time regaled with the domestic tea universally known and beloved in North Carolina. This is made from the leaves of the Ilex cassine It is here called Japan" (J. D. Schöpf, Travels in the Confederation (1783-1784), trans. and ed. by A. J. Morrison, vol. 2 (Philadelphia: W. J. Campbell, 1911), 113). Although apparently popular in colonial days in coastal North Carolina, its popularity declined in succeeding years probably because of the increased availability of imported tea, and by the Civil War it may not have been used by many people outside the Banks.

62. 1860 (8th) Census, North Carolina, vol. 9, Hyde County, 224.

Most families apparently gathered just enough yaupon for their own use. Welch's informant said that he had once worked "cutting wood and chopping yaupon" where Hatteras Inlet now is (Welch, op. cit., 41).

A little was gathered for trade for corn with mainlanders. Rev. Marble Nash Taylor, "Governor of North Carolina," about whom more will be said later, said in 1861 that the Bankers were "a poor race, living principally by fishing and gathering of yosakum, an evergreen of spontaneous growth, which they dried and exchanged for corn." E. A. Duyckinck, History of the War for the Union, vol. 1 (New York: Johnson, Fry & Company, 1862), 554.

63. Southerners sought local substitutes for imported goods during the war. Odd bits of old plant lore were revived and new recipes were invented, tried, and circulated. F. P. Porcher, Resources of the Southern Fields and Forests (Charleston: Evans and Cogswell, 1863), pointed out many useful plants to his countrymen.

M. E. Massey, Ersatz in the Confederacy (Columbia: University of South Carolina Press, 1952), reviews the many substitutes resorted to by Southerners in an attempt to provide normal living. Among coffee substitutes she lists rye, okra seed, corn, potatoes, sweet potatoes, acorns, dandelion roots, sugar cane, parched rice, cotton seed, sorghum molasses, English peas, peanuts, wheat, and beans (pp. 72-73). "To a lesser extent than coffee, tea was missed during the war. It was never as popular as coffee, yet there were those who wanted it sufficiently to search for substitutes. Most common of the expedients was sassafras tea, a beverage long familiar to many, especially Negroes. The leaves of blackberries, raspberries, huckleberries, currants, willow, sage, various vegetables, and the leaves of the holly tree were used as tea substitutes. One of the most famous substitutes was 'yaupon' tea. Long in use by many, it became popular in coastal regions where the yaupon grows in abundance. To make this tea, one used the leaves and twigs, usually boiling them in water and

adding molasses and milk. Fortunately for the times, it 'was considered vulgar to use sugar for sweetening Yopon.' The story is told that this same lady who refused to use sugar, remarked that yaupon tea was so healthful that it had kept her 'out of heaven' for years" (*Ibid.*, 74).

Josephus Daniels, in the first volume of his memoirs, records that because his family had lived at Ocracoke during the Civil War, his mother developed a fondness for yaupon tea. J. Daniels, *Tar Heel Editor* (Chapel Hill: University of North Carolina Press, 1939), 25.

For accounts of the use of yaupon on the Banks since the Civil War, see E. L. Green, Jr., "An American Drink," *American Forester*, vol. 51, no. 9 (September, 1945), 454; D. B. Jeffords, "Carolina Tea-Time," *Nature Magazine*, vol. 42, no. 5 (May, 1949), 224-225; R. M. Harper, "Economic Botany of Alabama," Part 2 Geological Survey of Alabama, *Monograph* 9, 1928, 246; and "Cape Hatteras--Observations of a Naturalist on this Famous Resort. Letter from Edenton, N. C. to the Baltimore Sun," *Baltimore Sun*, n. d. [1899], under "Hatteras and Hatteras Island" in newspaper clipping collection, North Carolina Collection, University of North Carolina. Especially valuable is H. H. Brimley, "Yaupon Factory," *The State*, vol. 23, no. 15 (December 17, 1955), 9-11. Brimley's article, although not published until 1955, was written in 1903.

64. It is frequently heard that many of the Bankers, especially at Avon, resent mention of yaupon. A children's jibe was "Kinnakeeter, yaupon-eater." It may be that the use of yaupon lingered longer at Kinnakeet (Avon) than at the other villages, and yaupon drinkers were looked down upon as people who could not afford imported tea. Since the ubiquitous yaupon could be gathered easily and without any equipment, both the collecting and drinking of it began to be stigmatized. People tend to look down upon those who make a business of gathering and selling any item which can be so easily procured, and beachcombing (gathering of wreck timber and the like) and eel-grass collecting (about which more will be said in the next chapter) may have received the same stigma. Clam-raking, for which one needs only a garden rake, was not accorded the same respect as fishing from a boat.

An example of the low esteem accorded to those who make their living by gathering or in other menial occupations is a letter from A. W. Simpson of Buxton, self-styled Hatteras Democratic leader, to Congressman J. H. Small, September 16, 1898, in which he said, "And the backbone of the Republican Party here are 'Yeopon-choppers'--'Mullet-Gillers' 'Beach-Combers'--and it is no wonder they are [sic] 'political Floaters'--A large percent of them--are up 'For value received'." See "Letters, 1863-1902, XV-E," in John Humphrey Small Papers, Manuscript Department, Duke University.

Perhaps it is significant that the last yaupon gatherers on Hatteras Island were Negroes. See Brimley, *op. cit.*, 9-11.

65. About 1856 Ruffin described market hunting in Princess Anne County, Va., on Back Bay, the northern continuation of Currituck Sound. One farmer in Princess Anne hired thirty gunners each winter. "Even northerners, as a regular business, come on every winter, to Princess Anne and elsewhere, to shoot wildfowl, and sell them to the northern cities." Ruffin, op. cit., 153-154. Ruffin said that there was market hunting also in Currituck County, but he did not elaborate on that statement.
66. Ruffin, op. cit., 151, said, "Since the complete closing of Currituck inlet, in 1828, and the water has become fresh, changes have been gradually effected in most of the productions. One of the most important was in affording new and remarkable attractions to wildfowl of passage. Three or more different kinds of fresh-water grasses, soon began to grow on the bottom of all the shallower waters . . ." Weiland, op. cit., 77, said that after the closing of the inlet "there were such changes in vegetation as brought countless thousands of ducks of species that had been only occasional before."
67. Did the waterfowl population really expand greatly after the closing of the inlet? Unfortunately there are no first hand accounts to settle this problem. An important factor to consider is that duck shooting, for market and sport, was really just beginning elsewhere in the East. The waterfowl resources of Chesapeake Bay, noted by the Jamestown founders and utilized for home consumption ever since by those who lived around its shores, were just beginning to attract sportsmen and market hunters in the first few decades of the 19th century. M. V. Brewington, Chesapeake Bay: A Pictorial Maritime History (Cambridge, Md.: Cornell Maritime Press, 1953), 222-223. Was it not natural that exploitation of waterfowl on Currituck Sound should follow soon after that of Chesapeake Bay?
- An indication that duck shooting was increasing in northeastern North Carolina even before the closing of Currituck Inlet was a law enacted by the General Assembly in 1822 entitled "An act to prevent the fire-hunting of fowl, Currituck County." The Laws of North Carolina, Enacted in the Year 1822 (Raleigh: Bell & Lawrence, 1823), 72, Chap. 130. Currituck County then included Roanoke Island and all the Banks portion of present Dare County. An act such as this indicates that something more than shooting for home consumption had commenced.
68. "In 1850, to be exact, Currituck County began to become famous as the greatest wild-fowl-shooting territory on the Atlantic Coast." E. Dean, "Currituck County," The State, vol. 18, no. 2 (June 10, 1950), 3. Currituck was undeserving of Dean's superlative statement, but the area did become very popular with sportsmen after the Civil War.

69. Creecy, op. cit., 284. Appreciation of the Sound's waterfowl resources was growing before the canal was opened, but the canal made the Sound more easily accessible.
70. Occupational names in the census are not of great help in this regard. The largest single group in the 1850 census on the Banks (Portsmouth, Ocracoke, Hatteras, and Roanoke islands and the North Banks) were the fishermen who made up 24% of the total jobholders, but this percentage should have been larger. 19% were "laborers." Probably laborers were those who worked on boats owned by other people. In the 1860 census only 14% were designated as fishermen, while 51% were "mariners." See note 45 above.
71. "Journal of a French Traveller," 735. Shad are Alosa sapidissima. Alewives, or river herring, are Pomolobus, of which there are two species in North Carolina, harengus and aestivalis, but the latter is more important. W. J. Leary, "The Fisheries of Eastern Carolina," The North Carolina Booklet, vol. 14, no. 4 (April, 1915), 174, states that commercial fishing for shad and alewives was introduced by Richard Brownrigg at least as early as 1769, but the above reference from the anonymous French traveler shows that even 1765 is too late a date for the beginning of commercial fishing in North Carolina.
72. Leary, op. cit., 175.
73. Ibid., 181.
74. Ruffin, op. cit., 146-148. F. L. Olmsted, The Cotton Kingdom, ed. by A. M. Schlesinger (New York: Alfred A. Knopf, 1953), 117-118. The best account is that of D. H. Strother ("Porte Crayon," pseud.), "North Carolina Illustrated. I. - The Fisheries," Harper's New Monthly Magazine, vol. 14, no. 82 (March, 1857), 438-442. Leary, op. cit., repeats some of Strother's observations.
75. Earll, 497, in Section 2 of Goode et al, The Fisheries. At first haul seines were used in this shore fishery for bluefish, but in 1853 the gill net was introduced. The bluefish is Pomatomus saltatrix. The name "tailor" (various spellings) is sometimes used as a name for all bluefish and sometimes only for young bluefish.
There was little ocean or beach fishing before this time. Keith, op. cit., 116, mentions a porpoise fishery established by Blount and Wallace in the 1790's, but she does not elaborate on this.
The Bankers, living on the sound side and plying their small craft in the sound waters, were never greatly concerned with the beach. Even today they sometimes call the ocean side of the Banks "the back of the beach."

76. Even the menhaden, occasionally called "fat-back" in North Carolina, were sometimes salted down and eaten locally by Bankers or traded. See G. B. Goode, "The Natural and Economical History of the American Menhaden," U. S. Commission of Fish and Fisheries, Report of the Commissioner for 1877, Appendix A, 91. Also H. M. Smith, The Fishes of North Carolina, N. C. Geological and Economic Survey, vol. 2, 1907, 133.
77. Price, op. cit., 625.
78. Creecy, op. cit., 175-176.
79. W. B. Franklin, Map (no title), 1851, National Archives, RG 77, Roll H-54 no. 2.
80. E. R. Outlaw, Jr., Old Nag's Head (Pueente, Cal.: La Pueente Valley Journal, 1952), [9].
81. Report of the Superintendent of the Coast Survey, 1849, 87.
82. G. H. Throop ("Gregory Seaworthy," pseud.), Nag's Head: or, Two Months Among "The Bankers." A Story of Sea-Shore Life and Manners (Philadelphia: A. Hart, 1850), 26, 47, 160.
83. Lefler and Newsome, op. cit., 295, say July 11th; S. A'C. Ashe, History of North Carolina, vol. 2 (Raleigh: Edwards and Broughton, 1925), 227, said July 12th; and W. K. Boyd, History of North Carolina, vol. 2, The Federal Period, 1783-1860 (Chicago: The Lewis Publishing Company, 1919), 60, said July 13th. Ashe, 227-228, said that the fleet consisted of "nine ships, among them two brigs and two schooners . . . [and] some thirty barges"; Boyd, 60, said that the fleet was made up of "one seventy-four, three frigates, one brig, and three schooners"; Lefler and Newsome, 295, say that there was "one large battleship and over one hundred smaller craft, including barges"; and Mrs. John Gray Blount in a letter to Mrs. James Madison from Washington, N. C., July 18, 1813 (Dorothy Payne Todd Madison Papers, University of Virginia Manuscript Department) said that the fleet consisted of "two 74 two frigates and several smaller vessels."
84. J. G. de R. Hamilton, History of North Carolina, vol. 3, North Carolina since 1860 (Chicago: The Lewis Publishing Company, 1919), 17-18. Fort Ocracoke was sometimes called Fort Morgan, and Fort Hatteras was also called Fort Ellis. For position of forts at Hatteras Inlet see "Map of Part of Hatteras Island" (National Archives, RG 77, Fortification Files 143-23). The Fortification File folder 143, sheets 6, 7, 21, and 22 give detailed plans of forts Hatteras and Clark. For the position of Fort

Forrest and the forts on Roanoke Island see "(Map) Battle of Roanoke Isl^d" (National Archives, RG 77, Flat H-81 no. 3). These were all earthwork forts, probably all octagonal. Of Fort Hatteras it was said, "It is constructed of sand, well revetted with sods from the neighboring salt marshes" (Armies, series 1, vol. 4, 591), and presumably forts Ocracoke and Clark at least were made in like fashion.

85. "Operating in the sounds were four small steamers, the 'Winslow,' the 'Beaufort,' the 'Ellis,' and the 'Raleigh,' purchased in Norfolk by the state and converted into gunboats, each mounting one gun." Hamilton, op. cit., 18. ". . . [The North Carolina Navy] consisted of the Winslow, a side-wheel steamer, mounting two guns, and the two canal tow-boats, the Raleigh and the Beaufort, carrying one gun each." W. R. Robinson, Jr., The Confederate Privateers (New Haven: Yale University Press, 1928), 102. This "Mosquito Fleet" was transferred to the Confederate States Navy in late July. For details on captures made by the Confederate privateers and navy vessels during their brief career at Hatteras, see Armies, series 1, vol. 4, 588. Also see D. H. Hill, Bethel to Sharpsburg, vol. 1 (Raleigh: Edwards and Broughton, 1929), 160-161.
86. Hill, op. cit., 164-165; Armies, ser. 1, vol. 4, 579-594; Hamilton, op. cit., 18. See especially J. M. Merrill, "The Hatteras Expedition, August, 1861," NCHR, vol. 29, no. 2 (April, 1952), 204-219.
87. Armies, ser. 1, vol. 4, 584, 587.
88. Official Records of the Union and Confederate Navies in the War of the Rebellion, ser. 1, vol. 6 (Washington: GPO, 1897), 223-224. Hereafter cited as Navies. Also see Armies, ser. 1, vol. 4, 617.
89. Navies, ser. 1, vol. 6, 378.
90. Ibid., 429.
91. Merrill, op. cit., 217; Hill, op. cit., 175; Armies, ser. 1, vol. 4, 597-598.
92. Armies, ser. 1, vol. 4, 592.
93. Loc. cit.
94. Ibid., 608-609, 611, 657-658; Hill, op. cit., 174, 176; Duyckinck, op. cit., 547.
The Bankers, who had never owned very many slaves because of the lack of opportunity on the Banks to acquire great wealth, never very warmly embraced the

Confederate cause. Neither did they welcome the Union soldiers. They wanted to be left alone in this war, the issues of which did not particularly concern them.

In 1850, when Negroes made up 36.4% of North Carolina's population, slaves constituted the following percentages of the districts on the Banks:

Portsmouth	23%
Ocracoke	19
Hatteras (Hatteras Inlet to the Cape)	13
Rest of Hatteras Island	?
North Banks	5
Roanoke Island	28

1850 (7th) Census, North Carolina Slave Schedules, vol. 2, Carteret County, 1-3; vol. 2, Currituck County, 986, 988-989; and vol. 4, Hyde County, Cape Hatteras Banks District; Hyde, Ocracoke District, 491. See also J. Cummings, Negro Population 1790-1915 (Washington: GPO, 1918), 51.

95. Duyckinck, op. cit., 554. George Bancroft presided at the meeting to raise funds for the relief of the Bankers, and William Cullen Bryant seconded Taylor's appeal.
96. Ibid., 555.
97. Loc. cit.
98. Loc. cit.; Hamilton, op. cit., 42; Hill, op. cit., 187.
99. J. S. C. Abbott, "Heroic Deeds of Heroic Men. I. - A Military Adventure," Harper's New Monthly Magazine, vol. 30, no. 175 (December, 1864), 3.
100. Navies, ser. 1, vol. 6, 526.
101. Armies, ser. 1, vol. 9, 73-191; Hill, op. cit., 195-209; Hamilton, op. cit., 19.

A Confederate notion to place obstructions across Croatan Sound was not carried out, and the few Confederate boats were hopelessly outnumbered. The forts, all on the northwest side of the island, were useless because the Union troops were landed at Ashby's Harbor, below the forts.

The easy victories at Hatteras Inlet and Roanoke Island were great morale-builders for the Union forces. As for the Confederates, the loss of Roanoke Island resulted in the censure of Gen. Huger and Judah P. Benjamin, the Secretary of War. Armies, ser. 1, vol. 9, 183-191. For the effects of the Roanoke Island defeat on Benjamin and on the Confederacy in general, see R. D. Meade, Judah P. Benjamin: Confederate Statesman (New York: Oxford University Press, 1943), 219-229. The effects

of these battles on the Confederate soldiers are well illustrated by two letters from a Confederate major to his mother, the first written September 11, 1861, and the second, February 16, 1862. Note that whereas the Union victory at Hatteras was mildly upsetting, it took the more important battle at Roanoke Island to shock the Confederates out of their complacency. The sobriety of the second letter contrasts with the near frivolity of the first.

(1) "We hear that New Bern is a very pleasant place of old Revolutionary associations, and celebrated for beautiful girls with wealthy paternals. A slight stampede among the inhabitants was caused by the advent of the enemy to Fort Hatteras, but they are recovering confidence and I hope the young ladies will return."

(2) "What an unfortunate disaster we had at Roanoke Island. I think, however, it will have the effect of causing our soldiers to re-enlist for the war more promptly than they would have done had our prospects been more bright in the future. It shows us that war is no child's play, and that we must be prepared to make every sacrifice in the cause we have embraced."

K. M. Rowland, ed., "Letters of Major Thomas Rowland, C.S.A. from North Carolina, 1861 and 1862," William and Mary College Quarterly Historical Magazine, vol. 25, no. 2 (October, 1916), 73, and vol. 25, no. 4 (April, 1917), 228.

102. G. R. Bentley, A History of the Freedmen's Bureau (Philadelphia: University of Pennsylvania Press, 1955), 13.
103. H. James, Annual Report of the Superintendent of Negro Affairs in North Carolina, 1864 (Boston: W. F. Brown & Co., 1865), 24.
104. Ibid., 24, 31.
105. Ibid., 24-25.
106. Ibid., 27-28.
107. Ibid., 3-4. They outnumbered the white residents of the island 6 or 7 to 1. Roanoke Island was not the largest Contraband center. In January, 1864, there were 17,419 refugee Negroes behind the Union lines, distributed as follows:

New Bern and vicinity	8,591
Washington and vicinity	2,741
Roanoke Island	2,712
Beaufort and vicinity	2,426

Plymouth and vicinity	860
Hatteras	89

In January, 1865, there were 17,307, distributed as follows:

New Bern and vicinity	10,782
Beaufort and vicinity	3,245
Roanoke Island	3,091
Hatteras	95
Plymouth and vicinity	94

108. In 1870, 32% of the population of Nags Head Township of Dare County was colored. This township consisted of Nags Head on the Banks plus all of Roanoke Island. The percentage for Roanoke Island alone would have been higher. Compare with 1850 slave population, note 95 above.
109. It is evident from the foregoing that the writer considers James' work the best that he has seen on this subject. Some works which give a brief mention of the Roanoke Contraband colony are: P. S. Peirce, The Freedmen's Bureau (Iowa City: State University of Iowa, 1904), 8; B. Quarles, The Negro in the Civil War (Boston: Little, Brown and Company, 1953), 95, 283, 295; and E. E. Hale, "Some Notes on Roanoke Island and James River," American Antiquarian Society, Proceedings, Oct. 21, 1864, p. 53.
110. James, op. cit., 38.
111. "Map of Part of Hatteras Island," National Archives, RG 77, Fortification Files 143-23.
112. 1800 (2nd) Census, North Carolina, vol. 5, Carteret County, 58.
113. 1810 (3rd) Census, North Carolina, vol. 3, Carteret County, 428-429.
114. Keith, op. cit., 115-117, 170. Also see Keith's published works: "Letters from Major James Cole Mountfloreance . . . , " NCHR, vol. 19, no. 3 (July, 1937), 254; "John Gray and Thomas Blount, Merchants, 1783-1800," NCHR, vol. 25, no. 2, (April, 1948), 196, 199; and The John Gray Blount Papers, vol. 1 (Raleigh: State Department of Archives and History, 1952), xxii-xxiii.
115. In 1870, when 36.6% of North Carolina's population was Negro (Cummings, op. cit., 51), the districts on the Banks had the following percentages of colored people:

Portsmouth	2%
Nags Head Twp of Currituck (Kitty Hawk to Caffey's Inlet)	5

Nags Head Twp of Dare County (Nags Head on the Banks and Roanoke I.)	32%
Hatteras Twp (Hatteras Inlet to the Cape)	4
Kennekeet Twp (Avon to Rodanthe)	1
Ocracoke	2

Compare with percentages of slaves in 1850 (note
95 above).

CHAPTER V

THE BANKS IN THE MODERN ERA, 1865-1955

After the Civil War the principal navigation improvements were those instituted by the United States government. The Army Engineers ultimately took over the improvement of harbors, channels, and inlets. Most of these improvements have been effective and lasting; the rest have been instructive in their failure.

There have been few changes, either natural or artificial, in the inlets in the modern period. As before, Hatteras and Ocracoke inlets were the only inlets used by boats larger than fishing craft. Of the two, Hatteras was the more important until the early 1890's.¹ From the close of the Civil War until 1870 a line of three steamships running between New Bern and New York used this inlet.² It was said in 1892 that Hatteras was the more important inlet,³ but a survey of inlet traffic in 1893 showed that Ocracoke Inlet had slightly greater commerce than Hatteras.⁴

The perennial demand of North Carolinians to create ports capable of handling a large maritime commerce led the Army Engineers to investigate the desirability of improving Ocracoke Inlet for this purpose. It was readily seen that this demand was unrealistic in light of the increasing improvement in road, rail, and canal transportation. After an

optimistic preliminary examination in 1889, Ocracoke Inlet was placed under governmental supervision in 1890, and a thorough examination of the inlet channels was ordered to determine which one should be deepened.⁵ Maj. W. S. Stanton and Lt. E. W. Van C. Lucas, as a result of very thorough surveys of Ocracoke Inlet between 1891 and 1894, advised against improving the inlet.⁶

Lt. Lucas, after a commercial survey of northeastern North Carolina in 1893, said:

About 90 per cent [of the lumber exported from the area] went out through the [Albemarle and Chesapeake] canal, 5 1/2 per cent through Ocracoke Inlet, and 4 1/2 per cent through Hatteras Inlet. This estimate is for lumber alone, and very little else is carried through the inlets, while lumber constitutes only a part of the freight through the canal. The navigable depths by all three routes being about the same, it is very apparent how much more important the canal route is.⁷

Lucas also reported a schooner captain's remarks on the feasibility of improving Ocracoke Inlet:

He thinks it even doubtful if the place is worth improving at all, as the number of vessels engaged in the trade is small and decreasing. In his opinion the lumber trade through Ocracoke and Hatteras inlets will cease entirely when the few vessels now engaged therein are lost or sold, as the present freight rates are so low that the schooners as a rule barely pay expenses, and often fail to do so . . . He further stated that the schooners could not compete with profit against the railroads and barges for the lumber trade at the present rates; that these rates are determined by the railroad companies and that the tendency is to make them still lower; also that lumber shipped by rail or barge arrived at its destination in far better condition than that shipped by sailing vessel, as on the latter the deck load was about as wet during the entire trip as it would be if rafted.⁸

Major Stanton noted the great decline in the long-leaf pine lumber and cypress shingle industries. He said:

Citizens of Washington, N. C., have prompted and strenuously urge the improvement of Ocracoke Inlet to give that town direct communication with the sea, a line of steamers to the north, build it up as a seaport, and restore the large foreign commerce which they say they had before the war. With the movement of cotton 6/7 by rail, 1/7 by canal, and the condition of the lumber and shingle trade above given, I am unable to find what this foreign trade from Washington would principally embrace, except the export of barrel staves and import of salt and molasses.

As very much of the large part of the freight that would go out of Ocracoke Inlet would be bound North, would emerge upon the coast 17 miles southerly from Cape Hatteras and would incur the dangers of the perilous shoals off the cape, . . . noted as being worse and more dreaded than any other part of the Atlantic Coast of the United States, I have . . . been more and more impressed with the disadvantages of the Outside route north, via Ocracoke, in contrast with the advantages of the interior route from the sounds by canal to Elizabeth City and Hampton Roads.⁹

He gave many examples of the dangers and delays involved in the outside route.

One mariner writes me "It is more trouble getting from Hatteras to Cape Henry in the winter time than from Cape Henry to Boston" . . .

One mariner wrote me . . . that on a trip he was then making he had been three weeks trying to get round Hatteras, beating against a southwester, and counted 55 vessels around him likewise baffled. Another writes that he has known vessels detained off the shoals fifteen to twenty days, and cites an instance of a vessel bound to the Pamlico River which abandoned its attempt to round the cape after a persevering effort, sailed back to Hampton Roads, returned south through the Albemarle and Chesapeake Canal and the sounds to the Pamlico River, there received its cargo and sailed out through the inlet, passing as it rounded Cape Hatteras, the very vessels with which it had attempted to double the cape going south, still to the north of it waiting for a good wind. Another instance is given of two vessels arriving at the cape together, bound, the one through Hatteras Inlet, 11 miles south of the cape, and the other to Galveston, Tex. The latter reached Galveston while the former was still waiting to get around Hatteras and into the inlet.¹⁰

Following orders, Stanton submitted a project for the improvement of Wallace's Channel, which he considered the better

of the two channels in Ocracoke Inlet, but for the reasons given in his and Lucas' reports he did not recommend the project. Nevertheless, probably because of political pressure, the Chief of Engineers approved the project and ordered that dredging be commenced.¹¹ Work was begun in Wallace's Channel on April 23, 1895, and the project was completed on January 1, 1897.¹² In 1897 an Engineer reported: "I am certain that the commerce of Ocracoke Inlet has materially increased by reason of the completion of the dredging there, since the ocean-bound commerce of Pamlico Sound was formerly divided between Ocracoke and Hatteras, whereas nearly all passes out of Ocracoke now."¹³

It was planned that the critical shoal areas in Wallace's Channel be dredged and maintained to a depth of nine feet, but the cuts shoaled quickly, and it was seen that they would require periodic redredging. The expenditure necessary to maintain the channel depth was not justified by the small amount of commerce through the inlet, thus bearing out Major Stanton's predictions. In 1899 it was reported: "It appears that the number of lumber schooners using the inlet is steadily decreasing."¹⁴ Two years later it was said that not Wallace's Channel but the channel past the village of Ocracoke was "used almost exclusively by the few vessels passing through the inlet."¹⁵ At this time a survey was made of Ocracoke and Beaufort inlets to see which was better qualified to serve as the southern terminus of a sixteen-foot-deep inland waterway which would enable ocean-going barges, the cheapest form of transport, to avoid Cape Hatteras and to connect South Atlantic

ports with the Chesapeake and northern ports. Although the Ocracoke route would have been shorter and therefore initially cheaper, it would have exposed the barges to the dangers of Cape Lookout and would have been much more difficult to maintain than Beaufort Inlet.¹⁶ This was Ocracoke Inlet's last serious bid for prominence. Beaufort Inlet's advantages were recognized, and the inland waterway system in this section of North Carolina which was to culminate in the Intracoastal Waterway was beginning to take shape.

Apparently the last use of Ocracoke Inlet by cargo vessels was in the first few years of the present century. Immediately upon the beginning of improvement of Ocracoke Inlet in 1895 the few lumber schooners using Hatteras Inlet forsook it for the Ocracoke route. A Hatteras informant told the writer that the last commercial ship other than a fishing vessel used the inlet in 1895. He knew this to be the date because he was told by his father that the ship had gone through the inlet three years before he was born, and the man was fifty-seven years old in 1955.

It was once proposed that Oregon Inlet be improved to accommodate vessels of the coasting trade. However, as a result of surveys in 1873-1874 and 1882 it was deemed unworthy of improvement. In 1874 an Engineer reported:

The advantages to be gained by the improvement of this channel and the inlet are, avoiding the difficult and dangerous navigation of Cape Hatteras and vicinity by all coasting-vessels entering Pamlico, and in case of those bound north of Hatteras Inlet for Roanoke Island, Albemarle Sound, or any of the rivers entering into it and the northern portion of Pamlico, a saving of time and distance, as at present they have to run

down to Hatteras, sixty miles south of Oregon, and then return the same distance up the sound . . .

Notwithstanding these advantages, I do not think them, at the present time, at all commensurate with the expense of such an uncertain undertaking as this improvement would be, especially as nearly the whole of the trade of Albemarle, and a large portion of that of Pamlico Sound, is now carried on through the Albemarle and Chesapeake Canal.¹⁷

Captain James Mercur in 1882 said:

The extremely unstable nature of the bar, and the great extent, very small depth, and constant shifting of the shoals within would render any attempt at improvement at a small expense entirely futile, and would cause any improvement promising permanence to be enormously expensive.¹⁸

Interest in improvement of Oregon Inlet lay dormant for several decades. However, a recent project supported by local interests calls for a fourteen-foot-deep channel through the inlet and twelve-foot channels to turning basins at Wanchese and Manteo. It is argued that a harbor of refuge inside Oregon Inlet would greatly reduce marine insurance. They reason further that straight deep channels would be appreciated by the local fishermen who must use the present crooked shallow ones. In addition, Manteo could develop into a great fish market for trawlers.¹⁹ To be sure, these expensive improvements would be extremely beneficial to Roanoke Islanders, but an outright gift of this sort would benefit any community. It is unlikely that the Engineers would ever implement such a grandiose scheme as that proposed above for Oregon Inlet. It is highly improbable that the Engineers in the future will ever undertake any inlet improvement. They will confine their dredging to channels and harbors, maintaining depths suitable to the needs of the local fishing boats.

Attention was drawn to New Inlet, not for improvement for navigation, but because it was the entrance into the upper sounds most used by anadromous fish. The decline in catch of shad and alewives was first attributed to the shoaling of New Inlet. Even though a recent survey of North Carolina's marine fisheries has shown that the decline of these fisheries was due, not to over-fishing or to inlet changes, but to obstruction and pollution of the fresh-water spawning streams,²⁰ the lessening of depths in New Inlet was watched gravely early in the century. In 1911 E. R. Daniels, a leading fisherman of the area, was quoted as saying:

New Inlet was a great inlet for shad. I guess now a man could nearly wade across. A fish does not come in an inlet that a man can wade across.²¹

In January, 1922, New Inlet finally closed,²² and the North Carolina Fisheries Commission Board appointed a Special Committee on Inlets to look into the possibilities of cutting an inlet through the Banks where New Inlet was or at any other place agreeable to the majority of the fishermen. Meetings were held in 1923 to ascertain the wishes of the fishermen,²³ and as a result of their investigations the Fisheries Commission dredged an inlet at the site of the former New Inlet in 1924, but it closed almost immediately.²⁴

Not heeding the failure to reopen New Inlet the General Assembly of North Carolina in 1925 passed an act calling for investigation of the feasibility of opening a new inlet opposite Roanoke Island for the purpose of raising the salinity in Albemarle Sound and thereby benefiting fishing. Because this

act carried no funds, the State Department of Conservation and Development could not make this examination immediately, but in 1928 the Department did undertake a reconnaissance survey.²⁵ This survey and the subsequent work of the Department resulted, not in the digging of any new inlets, but in the collection of a vast amount of data concerning inlets, beach erosion, and shore processes in general. In the early 1930's this work was taken over by the Army Engineers, and the 1935 and 1948 reports of the Engineers contain much valuable primary physical data on this coast.²⁶

In 1932 New Inlet suddenly reopened.²⁷ It was to close and then open again several times in the following decade. Apparently it opened for the last time during a storm in the fall of 1944, but it closed during that winter and has remained closed until the present time.²⁸ Recently there has been little interest in opening new inlets. The State's desire to increase salinity in the sounds by improving Ocracoke Inlet and by cutting an inlet near Roanoke Island was repeated as late as 1935,²⁹ but more recent manifestation of any such wish cannot be found.

The most effective and valuable improvements instituted by the U. S. Government have been the harbors dredged at certain Banks villages and the channels leading from those harbors to the same depths in the sounds. Villages so favored have been Ocracoke, Hatteras, Avon, Rodanthe, and Manteo. All this work was done by the Army Engineers, except the channel and T-shaped harbor at Rodanthe, which was dredged by the Coast Guard in

1936 to serve the now defunct Chicamacomico Coast Guard Station and only incidentally to serve the local residents.³⁰ See photograph, Fig. 6. The original depth of the channel to Rodanthe was seven feet, but by 1945 it had shoaled to about 4.5 feet, and a project was adopted by the Engineers to dredge and maintain a channel six feet deep,³¹ but nothing has been done about this, probably because the present channel depth is adequate for the local needs.

Improvement of the channel from Pamlico Sound into Silver Lake, Ocracoke's harbor, was begun in 1931 when the Engineers dredged a five-foot channel from that depth in the sound into the harbor.³² In 1939 Ocracokers asked for a channel ten feet deep to entice some Hampton Roads fish packers to relocate at Ocracoke. Hampton Roads packers said that this could not persuade them to relocate but that an improved harbor might be useful as a place of refuge for trawlers operating in the vicinity.³³ This project was carried out in 1942, not to benefit the fishing interests, but primarily to serve the wartime Navy and Coast Guard installations.³⁴ The last work of improvement in the harbor was some maintenance dredging in 1948,³⁵ and apparently the ten-foot depth still obtains.

In 1936 Rollinson Channel, leading from Pamlico Sound to a "natural basin" close to the village of Hatteras, was improved to a depth of six feet.³⁶ Maintenance dredging to keep that depth was carried out in 1939, 1948, and 1952, but nothing has ever been done on a proposal to extend that depth right up to the very village and to dredge a basin there.³⁷



Fig. 6

AERIAL VIEW OF RODANTHE

Note the artificial
T-shaped harbor.

-- Reproduced through the
courtesy of the North
Carolina News Bureau,
Department of Conservation
and Development, Raleigh

In 1939 it was proposed that a T-shaped harbor and a six-foot channel to that depth in Pamlico Sound be dredged at Avon.³⁸ This project was carried out in 1946, and maintenance dredging in 1954 has renewed the six-foot depth.³⁹

The harbor at Manteo came under development rather early. In 1910, when it was seen that five feet was the controlling depth into Shallow Bag Bay, on which Manteo lies, it was proposed that this be deepened to six feet.⁴⁰ This project was completed in 1911, and maintenance dredging was done in 1916, 1929, 1934, and 1948.⁴¹ A six-foot channel was dredged in 1941 from Manteo to Oregon Inlet, and this depth was renewed in 1953.⁴²

One can see from the above projects that a channel and harbor depth of six feet is perfectly suited to the present needs of the Bankers. Greater depths have been requested, but they have been shown to be unreasonable in terms of actual requirements and use. The greater depth at Ocracoke, necessitated by the wartime needs of the Navy and Coast Guard stations there, enhances its usefulness as a harbor of refuge for fishing boats operating in that vicinity. In 1949 part of Wallace's Channel was dredged to a fourteen-foot depth to serve the needs of menhaden vessels from the Beaufort-Morehead City area that might seek refuge there.⁴³ Maintenance dredging was done in this channel in 1955.⁴⁴

In 1912 the Engineers investigated the feasibility of a harbor of refuge in Hatteras Bight or at Cape Lookout. Shipping interests overwhelmingly favored Cape Lookout, as

the safer of the two sites. Col. Rossell noted that if the harbor were built at Lookout an extension of the railroad could be made from Morehead City, but an extension to Hatteras would be impossible. Congressman Small wrote in favor of the harbor at Lookout and envisioned rail connections and commercial facilities there. Small repeated the old cry: "There is absolutely no reason why eastern North Carolina should be tributary always to Chesapeake Bay."⁴⁵ The Engineers began to build sand fences at Cape Lookout to stabilize the dunes in 1913-1914, and in the following year construction was begun on a rubble-stone breakwater which was planned to be 7000 feet long.⁴⁶ In 1918, after the breakwater was built out to a length of 4800 feet, work was discontinued, and, when it was seen that a greater length was unnecessary in light of the small use of the harbor of refuge, the project was not resumed.⁴⁷ Statistics kept during the 1920's showed the declining use of the harbor of refuge by vessels, but the harbor has been of use to fishermen, who have always known Lookout Bight as a natural fish trap.⁴⁸ The opening of The Drain in 1933 made the Bight even more easily accessible.⁴⁹

After the Civil War most of the water-borne commerce northward left the State, not by the inlets, but by the Albemarle and Chesapeake Canal. The advantages of the canal were always cited when the question of inlet improvement came up. The Dismal Swamp Canal had fallen upon lean years after the war and could offer no competition to the Albemarle and Chesapeake.⁵⁰ The Dismal Swamp Canal was rebuilt beginning

in 1896 and was reopened to navigation in 1899.⁵¹ It immediately wrested the commercial leadership away from its rival. This is shown very well by the following figures for the average annual gross income of the two canals:⁵²

1886-1899	Albemarle and Chesapeake	\$ 81,000
1901-1909	Albemarle and Chesapeake	31,000
1901-1909	Dismal Swamp	72,000

However, the Dismal Swamp Canal was not able to enjoy its advantages very long because in 1913 the U. S. Government purchased the Albemarle and Chesapeake Canal as a link in the proposed Intracoastal Waterway.⁵³ The Dismal Swamp Canal, unable to compete with a toll-free, government-run canal, then began another decline. This canal was likewise purchased by the government in 1929,⁵⁴ but it has never regained the importance it held in the first decade of the century.

It was planned that the Intracoastal Waterway should be extended southward through the sounds to Beaufort, thereby removing the dangers of Capes Hatteras and Lookout altogether and promoting the barge trade.⁵⁵ The linking canals were to be twelve feet deep. Extending the Waterway southward from Albemarle Sound it was decided to use Alligator River and to cut a canal through to the Pungo River. An alternative route would have been to use Croatan Sound, but it was felt that a land cut was preferable because, although initially more expensive, it would be easier to maintain and would not subject the shipping to storms on the open waters of the sounds.⁵⁶ Had the Croatan Sound route been chosen, Roanoke Island would have profited, but the Waterway, as finally developed, was

constructed far from the Banks. Indeed, the building of the Waterway dealt a death blow to any hope of the Bankers for large-scale harbor, channel, and inlet development.

To connect the Neuse River with Beaufort, the Engineers constructed the Adams Creek Canal. This canal, begun in 1908 and finished two years later, supplanted the private Clubfoot and Harlow's Creek Canal.⁵⁷ The latter, although abandoned in 1856,⁵⁸ was reopened in 1880,⁵⁹ but it was never maintained in good condition.⁶⁰

The linking canals for the section of the Intracoastal Waterway between the Virginia line and Beaufort were all completed by February, 1930, and today the controlling depth for that portion of the Waterway is ten feet.⁶¹

The modern period has seen the rise and decline of most of the distinctive boat types of the Carolina Sounds. It is universally true in the eastern United States that most of the small-boat types came into being after 1850. Howard I. Chapelle, perhaps the leading expert on small sailing craft, has said:

In the days of sail, particularly in the last half of the nineteenth century, about two hundred distinctive types and sub-types of small boats were in use in North America . . . Most of these small sailing craft are now gone: their value in commercial work was destroyed when sail was replaced by low-cost gasoline engines in work-boats . . .

. . . it is at present, at least, quite impossible to establish a claim that many of the distinctive small-boat types began development before 1850; a few may have started development as early as 1825.⁶²

A carry-over from the earlier days was the log canoe, but it declined in use in favor of the newer types. The old terminology of "canoe" and "periauger" did not persist; in the

modern era canoes made of one log have been designated "dugouts," and canoes of more than one log have received the name of "kunner."⁶³ Log canoes have not been used on the Banks since about the turn of the century, but it has been said that a few dugouts might still be found on the Chowan and Roanoke rivers.⁶⁴

The most popular of the new types, at least on the upper sounds, was the "shad boat."⁶⁵ See photograph, Fig. 7. Chapelle has a long description of the shad boat.

While there were a number of small American working-boats fitted with the sprit mainsail and a jib . . . /the shad boat was the/only one that is known to have carried a topsail . . .

Many of the boats were built on Roanoke Island . . . and on the western shores of Pamlico Sound. They ranged in size from about 18 to 30 feet over-all length . . . The hull was undecked except for side decks, or washboards, which ran from the bow to the transom, and was finished on the inboard side by a low coaming strip . . . Local juniper, often called "southern cedar" in boatshops, was used throughout in building these boats, and they have lasted extremely well . . . The frames are cut from natural crooks, probably root knees . . .

All of the boats in this section of the coast were well built in plain, workmanlike fashion. The topsides are usually painted white; some boats have black and red bands in three narrow stripes along the gunwales, which set off the strong sheer very well indeed. No local tradition as to the introduction of the . . . /shad boat/ could be discovered, but it seems very probable that the type was introduced after the Civil War.⁶⁶

Most of the shad boats were built in Manteo by the Creef and Dough families. Horace Dough, a former boatbuilder and now superintendent of the Wright Monument at Kill Devil Hills, informed the writer that the first shad boat was built by a Creef "about a hundred years ago."⁶⁷ Mr. Dough said that the shad boats generally ran about twenty-two feet to twenty-eight feet in length. He stated that the frames were naturally

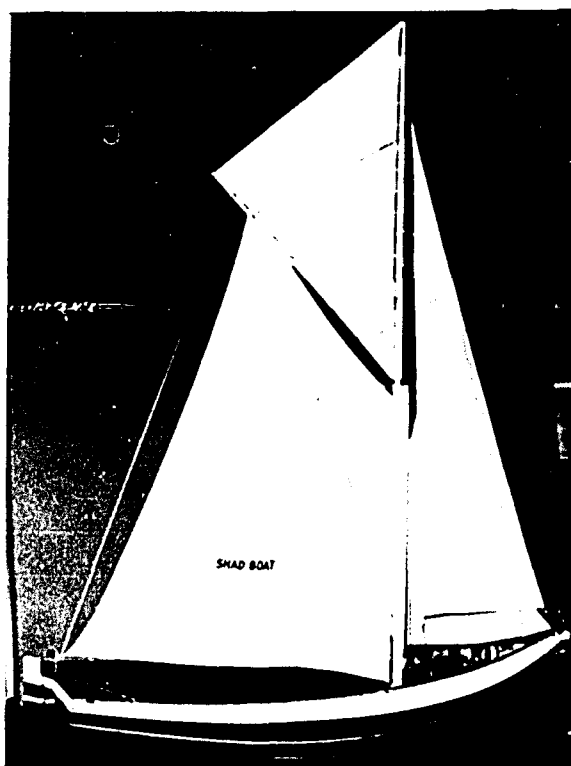


Fig. 7

SHAD BOAT

Model in the North Carolina
State Museum

-- Reproduced through the
courtesy of the North
Carolina State Museum,
Harry Davis, Director

curved and were made from root knees. This curved-hull style is no longer employed because of the difficulty of getting natural frames and the comparative ease of making straight floors and sides to form an angular bilge.

It is said that shad boats were once used in the lower sounds for oystering; however, they were replaced in this occupation by sharpies in the 1880's. The term "sharpie" meant a sharp-bowed, flat-bottomed skiff.⁶⁸ See photograph, Fig. 8. The sharpie was introduced into North Carolina from New Haven, Connecticut, in 1875, when one was bought by George Ives and used in fishing out of Beaufort.⁶⁹

Chapelle says the following about the development of the "Carolina" sharpie from the New Haven sharpie:

The Carolina sharpie was built locally, soon after the Ives boat became known. Gradually, local departures in rig and model appeared . . .

The Carolina sharpies gradually increased in size, and by 1890 many boats were 40 or 45 feet in length, and cabins were often added. Soon the boats were rigged as schooners, and these became numerous in the oyster-dredging on the Carolina Sounds. In this work large sail area was required, and so the schooner rig replaced the old New Haven sharpie sail plan . . . In general, the Carolina sharpies were wider than the ones at New Haven, in proportion to length, and were not as fast as the latter but were safer and more powerful working boats.⁷⁰

The sharpie began to be built with a rounded stern. These boats received the name of "Core Sound" sharpie, and at present a "Core Sound boat" or "Core Sounder" is any boat with a rounded stern. The Core Sound sharpies were apparently not generally used north of the village of Hatteras.

The shad boats and sharpies were replaced by the dead-rise skiff, sometimes called simply the "dead-rise" or "V-bottom." The use of the V-bottom hull form came rather late

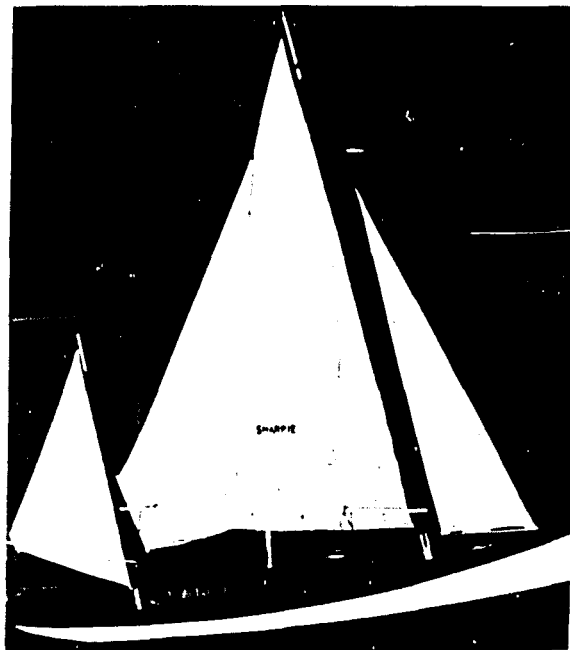


Fig. 8

SHARPIE

Model in the North Carolina
State Museum

-- Reproduced through the
courtesy of the North
Carolina State Museum,
Harry Davis, Director

in America; it was not used widely in New England and New York waters until the 1880's and was not taken up by Chesapeake boatbuilders until late in that decade. From that time on, however, this boat type became extremely popular on the Chesapeake, and "the Bay became the acknowledged home of the V-bottom."⁷¹ In North Carolina the V-bottom was built using the same hull profile as the shad boat, except that whereas the latter was curved at the bilge, or chine, in the V-bottom a straight rise of floor was combined with straight sides, so that an angular bilge was formed.⁷² The Core Sound dead rise, a rounded-stern, V-bottom boat, is well known from Harker's Island to Hatteras and is intruding into more-northerly areas. The V-bottom is now built only as a power boat, and it is the most common type on the Carolina Sounds. It is used for fishing in the sounds and also for outside fishing, and shrimp trawlers are commonly built in this form.

Apparently the only active boat-builders around Roanoke Island and the Banks today are a man at Point Harbor and another at Wanchese. Many people still build small boats for themselves. There is still a considerable number of old-time boat-builders who could build boats, even shad boats, if there were a demand, but the days of small boats, particularly sailing craft, are past. Mass-produced, factory-built boats are now cheaper. Trucks and hard-surfaced roads have facilitated transport and ruined boat-building.⁷³

Before the coming of automobiles, carts were an important form of land transport. On Roanoke and Colington islands ox carts

were not infrequently seen before World War II.⁷⁴ A Roanoke Island Negro had an ox-drawn cart until very recently (Fig. 9), but the only cart seen there in 1955 was horse-drawn. On the Banks the swiftest mode of transport before the introduction of automobiles was the "beach cart," a light, high, two-wheeled cart. See Fig. 10.

Originally the roads were merely trails through the wooded areas, or the very beach itself was used as a highway. On the 1862 Coast Survey map, "Chart of North Carolina and Virginia," the road switches to the beach from Caffey's Inlet northward and is labeled "cart track at low water."⁷⁵ The situation in that same area today is unchanged; north of Caffey's Inlet the beach is the best and most used thoroughfare. Even a jeep finds rather difficult going on the interior trails.

The 1862 Coast Survey map shows a road through the wooded area on the sound side from Nags Head north to Caffey's Inlet. Most of this roadway still exists, presumably in exactly the same location, but the going is difficult near Nags Head where the road, right at the sound shore, is partially eroded away. This trail has been little used since the tourist development on the beach has diverted interest and traffic to the ocean side, and the modern highway now runs near the beach. The new asphalt road on Hatteras Island now runs nearer the beach than the sound side, except where it diverts to serve the villages. Only Avon is not located on the main road. All the villages on Hatteras Island are connected by the highway, and some have paved side roads in the village.

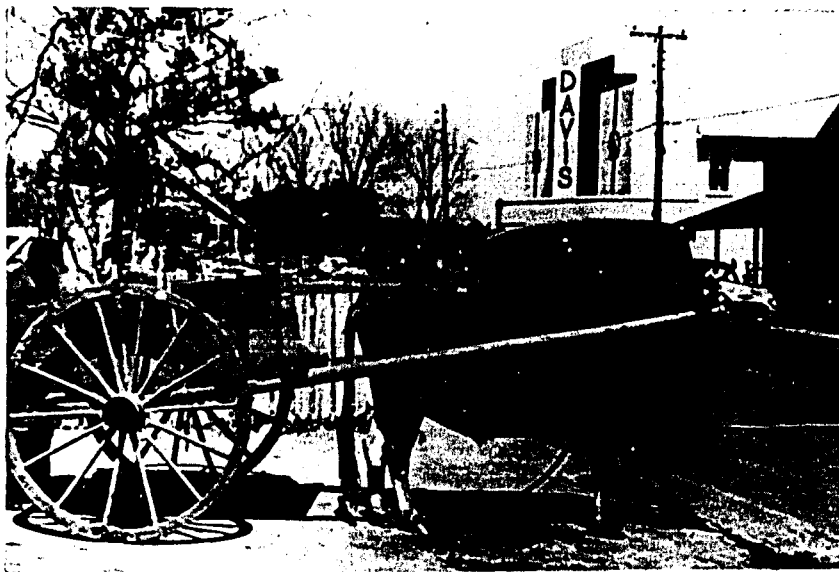


Fig. 9

OX CART IN MANTEO

-- Reproduced through the
courtesy of Delos Smith

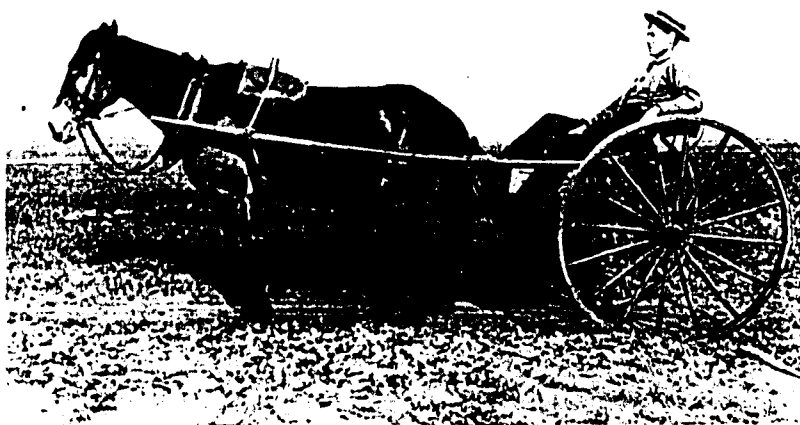


Fig. 10

BEACH CART

Photograph taken by H. H. Brimley
at Cape Hatteras about 1903.

-- Reproduced through the
courtesy of the North
Carolina State Museum,
Harry Davis, Director

Plans are now underway to construct an asphalt road the length of Ocracoke Island, from Hatteras Inlet to the village of Ocracoke. At present the only road is a trail called the "Inside Road" down the center of the island, but the going can be rather difficult on this road, and many drivers prefer the beach. The village of Ocracoke has a network of little roads, mostly ten-foot-wide concrete roads, another convenience brought by the Navy and Coast Guard during World War II. When the paved road is finally constructed to Hatteras Inlet, free ferry service will be provided across the inlet. A small private ferry now traverses the inlet. Until very recently a private ferry connected the village of Hatteras with Englehard on the Hyde County mainland, but the new asphalt highway and free ferry service across Oregon Inlet have made Hatteras Island very easily accessible from the north and have rendered this ferry uneconomical.

The Kitty Hawk-Nags Head area and Roanoke Island have been reached easily by tourist automobiles since 1930, when the 2.9-mile-long Wright Memorial Bridge was constructed across Currituck Sound to connect Point Harbor with the Kitty Hawk woods area opposite.⁷⁶ A private car ferry had run between those two points since 1919.⁷⁷ With this bridge came bridges across Roanoke Sound and 33 miles of hard-surfaced state highways which ran from the Wright Bridge south to the bridge across Roanoke Sound and the length of Roanoke Island.⁷⁸

New roads and the elimination of the ferries which had run from Point Harbor to Kitty Hawk and Manteo⁷⁹ made the area much more easily accessible to large numbers of tourists and

greatly reduced the small-boat traffic. The Trenton, a steamer which ran between Manteo and Elizabeth City, could not compete with motor transport and was forced to stop in 1936.⁸⁰ Good roads and bridges meant the rapid removal of fish by trucks, a service previously performed by boats. The Dare County mainland has been connected with Roanoke Island by free ferry across Croatan Sound, but a bridge across the Sound is now being completed. The bridges and improved roads were first constructed partly in response to the desire of increasing numbers of tourists to come to the Banks, and the constantly increasing use of the Banks by tourists has meant more bridges, more side roads, and, in general, a fine communications network which the Bankers would not be enjoying, at least so soon, if it were not for the vast hordes who descend upon them each summer.

The improvement of roads and bridges in the Kitty Hawk-Roanoke Island area which brought such great numbers of tourists to the area after 1930 wrought a tremendous cultural revolution in the area. The passing of old folkways was hastened, the occupational structure was changed greatly, and land values rose. Ironically, in a seaside area, the property most highly prized is that which was of least value prior to the advent of tourists--the beach itself. This sandy waste, the portion of the Banks most vulnerable to storm damage, has the two features, sand and sea water, which constitute the prime attraction of the area to tourists. This same great change is taking place on Hatteras Island as the result of transportation improvements, and the new road on Ocracoke will introduce the village to a

greater number of vacationists. Hatteras Island is being invaded by so many tourists that it has been predicted that Oregon Inlet will be bridged by 1960.⁸¹ The acquisition by the National Park Service of all the Banks from Whalebone Junction south to Ocracoke Inlet prevents the repetition there of the pattern established in the Nags Head-Kitty Hawk area.

The two villages on the Banks which have seen the fewest tourists are those which are least accessible: Corolla and Portsmouth. The former is now reached only by boat or by an arduous jeep ride up the beach from Caffey's Inlet or down from Virginia. However, interest is now growing in a private scheme to construct a toll road from the Kitty Hawk area north to Virginia Beach. Such a scheme would mean the rapid development of the whole beach between those two points. Portsmouth, with no land connections, is now regularly served only by the mail boat which runs between Atlantic and Ocracoke. The mail, groceries, and passengers destined for Portsmouth are decanted into a small skiff which a local resident poles out to meet the mail boat (Fig. 11). However, all available houses and lots at Portsmouth have been bought up in anticipation of future tourist possibilities. Portsmouth will attract the tourists who like remote spots, but who, by their presence and demand for services, always destroy that remoteness. A few of Ocracoke's devotees will probably transfer their affections to Portsmouth.

On page 153 is a map, Plate IV, showing the present transportation network on the Banks. Some, but not all, of the paved roads on the mainland are shown also.

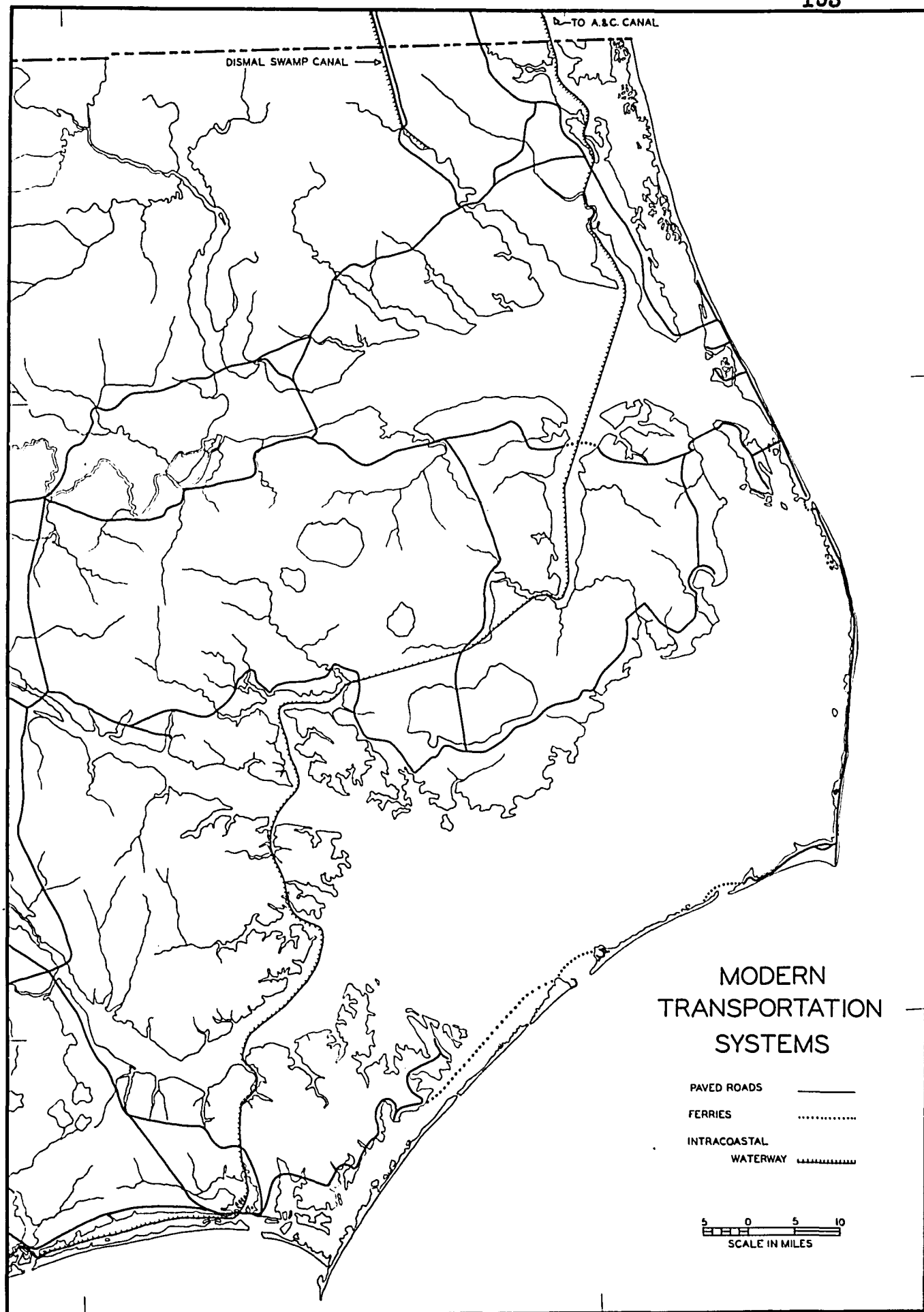


Fig. 11

SMALL SKIFF WHICH MEETS THE
MAIL BOAT AT PORTSMOUTH

Taken in July, 1949

-- Reproduced through
the courtesy of
C. A. Weslager



The economy of the Banks has undergone greater changes in the period since the Civil War than in all the previous periods. The Banker, formerly a man of numerous skills, now concentrates on a single occupation which yields cash with which he buys imported food items. As one might suspect, the gardens on the Banks have become smaller. With minor exceptions, the only real farmers had always been on Roanoke Island, and although in the 1950 census there were ten farmers reported from Roanoke Island, in 1955 only one elderly Negro was said to be "earning his living from the soil."⁸² Two men in the Frisco area have lately been raising some potatoes, both white and sweet, for sale to local residents and stores, but this apparently constitutes only a small part of their livelihood.⁸³ As in the previous periods, the individual garden is really the only form of agriculture. Of the fruit trees, figs are the most important. The recently introduced orange trees at Buxton serve primarily as proof to tourists of the mildness of the climate and are much photographed. A minor agricultural industry is the small winery connected with the locally famous Mother Vineyard, a single old scuppernong grape vine which covers more than an acre near Baum's Point in the northeastern part of Roanoke Island.⁸⁴

Free ranging of stock has largely been eliminated as incompatible with the new uses of the land. Presumably the mainland owners of the large herds which Ruffin⁸⁵ reported from Currituck and Core banks became increasingly conscious of the value of breeding for quality and thus began to remove

cattle from the Banks after the Civil War. In most sections of the Banks, herds dwindled and were sometimes regarded as a nuisance. Ironically, when the livestock population had diminished to a number which was probably the lowest figure in two centuries, the animals began to receive the brunt of the blame for the alleged great deforestation of the Banks. When the planting and dune-building projects of the WPA were begun in the 1930's, it was deemed necessary to declare the Banks from the Virginia line down to Hatteras Inlet as stock-law territory and to force the removal of unpenned stock. It was enacted that no stock should run at large on Roanoke Island and all the Banks portion of Dare County, Caffey's Inlet to Hatteras Inlet, after February 1, 1937.⁸⁶ Stock raisers on the Banks portion of Currituck County were allowed until July 1, 1939, to pen or dispose of their stock.⁸⁷ In 1955 the only stock seen in these areas was fenced. The stock law has never been applied on Ocracoke Island, which is in Hyde County, or on the Banks portion of Carteret County. The Ocracoke ponies are quite useful as a tourist attraction. Not to be classed with "banks ponies" and "tackies," these horses have recently been improved and are eminently photogenic.⁸⁸ Their number is kept sufficiently large to lend an authentic air to the annual Ocracoke pony pennings, held every July 4th, an event now staged mostly for the benefit of the large number of tourists on that day.⁸⁹

An unusual occupation briefly engaged in by a few Bankers earlier in this century was the collecting of eelgrass, Zostera



Fig. 12

AN OCRACOCKE PONY

Taken to show why most Ocracoke houses have fences around them. One can see that the Ocracoke "ponies" have been improved and are not like the small, shaggy "tackies" of old.

marina, a salt-water plant which abounded in Pamlico and Core sounds and which is used in the stuffing of mattresses and furniture. Eelgrass is found along the east coast of North America from Greenland as far south as Beaufort, North Carolina.⁹⁰ Other areas on the eastern seaboard where eelgrass has been gathered for sale to upholstery manufacturers were Canada, Long Island, New Jersey, and the Chesapeake Bay area.⁹¹ In Europe it was collected in France, Great Britain, Netherlands, and Norway.⁹²

The Avon eelgrass industry was begun in 1912 by C. T. Williams after he learned about the value of this locally plentiful plant. Williams continued until 1925, with an intermission in 1917-1918. In the period 1912-1917 there were four men engaged in this business at Avon, each employing as many as ten people in the peak season, which extended from late spring until early fall. A Norfolk concern tried to break into the business and established a warehouse at Frisco, but because of the scarcity of eelgrass there, they soon sold out to Williams. For a limited time there was some collecting at Wanchese.⁹³

Stick has made detailed notes on the Avon eelgrass operations, which bear quoting at length because this information cannot be found in the literature.

At one time Williams "harvested" the entire shoreline from Little Kinnakeet to Buxton. The eel grass . . . would break loose in the spring and float to shore, sometimes in vast rafts a hundred feet or so across. Williams and his crew would move the grass, using pitchforks, from the water to the dry ground above the shoreline, spreading it two to four inches thick. A day or so later they would return, and turn over the grass so

the other side could be exposed to the sun and air for curing purposes. After a week or so the grass would be sufficiently cured or dry to be baled.

Sometimes the baling was done on the shore; sometimes the grass was taken back to a warehouse, built especially for this purpose, and baled there. Most balers at Kinnakeet were made locally, though a few were purchased elsewhere. Slat s were laid in the bottom of the baler, cured grass was thrown in until a fairly high pile was accumulated, then a boy hired for the purpose, would jump up and down on the pile of grass until it was tightly packed, and more grass would be added, the boy packing it down again. Finally, more slats were put over the top, and the baling wire was clamped around to make the bale. The bales ran from 100 to 125 pounds in weight, and were about the size of a bale of hay . . .

Williams sold an average of between 100 and 200 tons a year, and received between \$15. and \$30. a ton for it at the destination.⁹⁴

Informants from other villages in 1955 referred to eelgrass as "seahorse" or "seaweed"⁹⁵ and said that it, like yaupon, was something that a wise person does not allude to in the presence of a Kinnakeeter.⁹⁶

In 1930 eelgrass began to be attacked by parasitic organisms over its entire Atlantic Coast range and was almost completely wiped out. The eelgrass industry at Avon had stopped in 1925, but this blight prevented any thought of revival. Greatly affected were wildfowl and scallops. Scallops used eelgrass as a surface for attachment and diminished greatly when the eelgrass was removed.⁹⁷ Eelgrass was a very popular wildfowl food, particularly among brant, and the decline in eelgrass after 1930 was paralleled by a decrease in the brant population.⁹⁸ A fairly good recovery of eelgrass has recently been noted.⁹⁹

Bird hunting became an important occupation for many Bankers. There was a great deal of plume hunting on the eastern

shore of Pamlico Sound from about 1882 to 1903, when it was prohibited.¹⁰⁰ Feather hunters were reported from Cape Hatteras and Ocracoke in 1897.¹⁰¹ The bird shot in greatest numbers was the least tern, but common terns, grebes, and egrets were also hunted.¹⁰² In 1903 the first Audubon game warden was sent to Pamlico Sound, and the activities of the plume hunters were rather abruptly curtailed.¹⁰³

The hunting of waterfowl for market became a leading occupation on Currituck Sound just after the Civil War and continued until 1918, when the Migratory Bird Treaty Act made the sale of migratory waterfowl illegal.¹⁰⁴ Apparently the peak years came in the first decade of this century, and it was then that the record kills were made. Until October 1, 1913, there was no limit to the number of waterfowl an individual could kill, and some amazing records were established before that time.¹⁰⁵ In the month of November, 1905, St. Clair Lewark and three companions shot 2,300 ruddy ducks, Lewark personally accounting for 282 in one day.¹⁰⁶ Supposedly the record kill was made by Russell and Vann Griggs, who shot 892 ruddy ducks in one day.¹⁰⁷ The prices paid varied greatly over the years and from one year to the next, but in general the canvasbacks and redheads brought the highest prices, while the ruddy ducks, buffleheads, teal, swans, and Canada geese were in much less demand.¹⁰⁸

There were virtually no restrictions on the equipment used in the early days. Until about 1884 muzzle-loaded shotguns were used, but after that time the double-barreled breech loader

was more common.¹⁰⁹ About 1908 the Remington Arms Company introduced the automatic shotgun, and paper shells also came into use at that time.¹¹⁰ The gigantic "punt" gun, with a barrel about ten feet long, was naturally a very effective weapon, but it has long been outlawed.¹¹¹ The gunning rig usually consisted of a one-man sink battery, on the deck of which were placed iron weights to sink it to surface level, and which had wings on all sides to break the waves.¹¹² From 250 to 300 wooden decoys, or "idols," were then placed around this battery. A great deal of the work, from hauling the gunning rig to retrieving the dead birds, was accomplished by shad boats.¹¹³

The gunners would either take their kill to the local buyer, or the buyer would pick up the birds from the batteries in his own boat. In the early days, the waterfowl were not iced before shipping; they were merely hung up overnight to cool off and were then packed in barrels and taken by steamer to Norfolk.¹¹⁴ Later, however, the birds were iced. They were packed head-down in sugar barrels with a layer of ice between each layer of ducks, or sometimes a stovepipe filled with ice was placed in the center of the barrel and the ducks were packed around it.¹¹⁵ These wildfowl were shipped to Norfolk and went from there to northern ports.

From 1903 to 1909 about four hundred Currituck men turned to duck hunting in the winter, and their total annual earnings averaged about \$100,000.¹¹⁶ In 1911, William Tate of Kitty Hawk estimated that about 350 to 400 people in Currituck

County engaged in hunting for a living, but he also stated that there were more engaged in fishing.¹¹⁷ Actually, since the hunters turned to fishing in the summer, it is very hard to separate the two occupations. Most of these Currituck hunters lived on the mainland, but a few lived on the Banks, and men in the Kitty Hawk-Duck area also engaged in gunning on Currituck Sound.¹¹⁸

Wildfowl shooting for sport became very popular after the Civil War. Currituck Sound became a favorite resort of wealthy sportsmen. Locals profited from their coming because these non-resident sportsmen needed them to serve as guides or as caretakers of the lodges, and they also hired local boats and purchased some supplies locally. Many lodges were built around the shores of Currituck Sound, ranging from modest cabins to very pretentious structures like the Whaleshead Club at Corolla. Club houses were also built at Bodie Island,¹¹⁹ Pea Island,¹²⁰ and at Duck Island south of Wanchese, and also there were many cabins or camps to accomodate sportsmen on Core Banks, Ocracoke Island, and Hatteras Island.¹²¹

Improved transportation and the taking up of the sport of duck shooting by less well-to-do people has meant the decline of hunting lodges. Also, the number of restrictions on hunting has increased. It is now illegal to use live decoys, to use a shotgun larger than ten gauge or repeating guns capable of holding more than three shells, or to shoot from a moving or movable device.¹²² This last restriction has had the effect of causing most of the shooting to be done from blinds, and there



Fig. 13

BODIE ISLAND GUN CLUB

No longer in use.

-- Taken by F. B. Kniffen

is much care in the selection of site for these blinds.¹²³ The blinds are largely in the marshes on the sound side of Currituck Banks.¹²⁴ These marshes are the duck feeding areas, but the resting or rafting area is in the middle of the sound, so that these measures protect the waterfowl in the resting areas.¹²⁵

The waterfowl population of the sounds has undergone some considerable changes over the years. Before 1913 market hunting was probably the most important single factor influencing the numbers of the birds. Sport shooting does not result in rapid decimation of species, but the number of hunters has been rising annually and is paralleled by an increase in the annual kill. Changes in the vegetation of the sounds have also influenced the wildfowl population. The removal of the eelgrass and the consequent decline in brant have been noted.¹²⁶ Very important to Currituck Sound was the removal of the tide guard lock in the Albemarle and Chesapeake Canal in 1918 when the canal was deepened and the lock became unnecessary. The removal of the lock resulted in the pollution of Back Bay and Currituck Sound by allowing turbid water to flow through from Norfolk harbor. Increased turbidity resulted in the destruction of aquatic duck food plants.¹²⁷ After a great deal of pressure, the Army Engineers replaced the lock on the Albemarle and Chesapeake in 1932.¹²⁸ Any dredging done to maintain channels also increases turbidity locally. Other factors which have had harmful effects on the vegetation of Currituck Sound have been salt water intrusion across the Banks during storms,¹²⁹

increase in the number of carp,¹³⁰ and an occasional influx of highly acid swamp water from drainage operations in the Back Bay area of Virginia.¹³¹ A cause of decline of numbers of waterfowl not only in Currituck Sound but elsewhere on the continent as well have been the severe droughts in western breeding grounds during the early 1930's and drainage of marshes in the western United States and Canada.¹³²

Currituck Sound has retained its position through the years as the greatest waterfowl hunting area in North Carolina. At present it is followed by the following areas, in descending order: Lake Mattamuskeet, Core Sound, and Oregon Inlet.¹³³ No hunting is permitted on Pea Island, which is now a National Wildlife Refuge, and shooting is restricted in some other portions of the Cape Hatteras National Seashore Recreational Area.

Fishing has been the leading occupation of the Bankers throughout the modern period. The development of a diversity of means of livelihood, however, has meant that the percentage of fishermen among the total number of jobholders has, in general, steadily declined from about fifty-five per cent in 1870 to about twenty-three per cent in 1950. In 1950 fishing was the leading single occupation in every census district on Roanoke Island and the Banks except within the incorporated limits of Manteo, where carpenters had a slight edge over fishermen; on Nags Head Banks and on Roanoke Island outside of Manteo and Wanchese, where the number of fishermen was exceeded only by the number of carpenters and cement workers; and in

Kennekeet Township (Avon to Rodanthe), where Coast Guardsmen surpassed fishermen, a situation which no longer obtains because of the removal of most of the Coast Guard stations. The growth in the building trades on Roanoke Island and on the Banks from Nags Head to Kitty Hawk is due to the great increase in the resort development of that area. Since 1950 the number of commercial fishermen has probably dropped considerably. Some fishermen are spending more and more of their time taking out sportsmen; others are dropping fishing completely. A few villages have always exhibited a very high percentage of fishermen in relation to other occupations. These are Portsmouth, most of the Hatteras Island towns, Wanchese, Colington, and Duck. This reflects not so much proximity to excellent fishing areas as it does their comparative isolation and lack of alternative opportunities.

As before, most of the fishing in the modern period has been done in the sound waters. The North Carolina fisheries are notable for the great amount of shore and boat fisheries as opposed to vessel fisheries.¹³⁴ In fishery statistics craft of five or more net tons are classed as vessels, and all under five are classed as boats. Vessel fisheries in North Carolina are now concentrated mostly in Carteret County, with the vessels, mostly menhaden vessels, operating in outside waters and based at Morehead City. Dare County, on the other hand, has been remarkable for its almost complete lack of vessel fisheries. After the Civil War Dare County rose to first in number of people employed in fishing and first in value of product, but

by 1897 Carteret gained the lead in numbers employed. For a while after 1897 Dare retained supremacy in value of catch because of the great value of its shad fishery.¹³⁵ With the decline in catch of anadromous fishes in Dare County and the development of Carteret's extensive vessel fisheries, the latter county has surged to the fore and now leads Dare by a comfortable margin.¹³⁶

Before the Civil War most of the shad and alewives were taken in the large haul-seine fisheries established along the shores of Albemarle Sound.¹³⁷ Such extensive operations needed a great capital outlay and required a large pool of seasonal labor, which consisted mostly of local free negroes. After the war more-efficient methods were introduced into the haul-seine fishery, such as the introduction of the steam winch in 1869 to haul in the nets and the use of small steamboats to lay out the nets beginning in 1879.¹³⁸

However, in 1869 or 1870 the pound net was introduced into Albemarle Sound,¹³⁹ and it proved to be a cheaper and more efficient means of catching fish. By 1904 the pound net was the most important kind of apparatus used in the shad fishery.¹⁴⁰ The Pamlico Sound shad fishery was begun in 1873 and from the first depended upon pound nets and gill nets.¹⁴¹ Pound nets were not everywhere well received or successful. When the pound net was first introduced into the Beaufort area in 1879, local fishermen soon destroyed it.¹⁴² Attempts to put pound nets in the ocean were largely unsuccessful. Their success in the ocean at Sandy Hook, New Jersey, led some North

Carolínians to experiment with them. These efforts were discouraged by the heavy surf and the antipathy of the local fishermen. George Ives, the great Beaufort innovator, claimed that at one time he wanted to put pound nets in the ocean at Cape Lookout but that Carteret fishermen were opposed to the idea.¹⁴³ Dr. J. J. Davis, the versatile Buxton medical doctor, early in this century brought in some New Jersey fishermen to show the locals how to set a pound net in the ocean, but the natives were reluctant to try the idea and gave it up after a few half-hearted attempts.¹⁴⁴ It is said that Swedish fishermen from New Jersey planted pound nets in the ocean at Nags Head beginning in 1893 and caught large quantities of Spanish mackerel.¹⁴⁵ Others have been successful with pound nets in the ocean at Nags Head. W. F. Baum of Manteo once had one where Jennett's Pier now is at Whalebone Junction.¹⁴⁶

Dare County fishermen readily adopted the pound net and began to set out nets especially on the shoals in the northeastern part of Pamlico Sound, there to trap the anadromous fishes entering Oregon and New inlets before they could be caught by fishermen on Albemarle Sound. The fishermen would camp on some island or point within an hour's run of their pound nets, returning home only for the week-ends. These temporary camps were located at such places as Roanoke Marshes, Hog Island, Duck Island, and Stumpy Point in northern Pamlico Sound.¹⁴⁷ Fishermen from Wanchese, Rodanthe, Waves, and Salvo could live at home and still be within the one-hour radius of the fishing grounds.¹⁴⁸ By the turn of the century Dare

fishermen had established so many pound nets on the flats inside the inlets that the Albemarle fishermen thought that the anadromous fish would be largely prevented from reaching Albemarle Sound. After entering the inlets the fish reached Albemarle Sound by way of Croatan Sound, and this water body too was lined with so many pound nets, particularly on the western shore, that the fish had to run a veritable gauntlet before the Albemarle fishermen could have a chance at them. This situation resulted in the Vann Law of 1905, which provided that an open channel be maintained from the inlets to the spawning grounds, and most of the nets were removed from the very popular Duck Island flats.¹⁴⁹ Albemarle fishermen reported that the Vann Law gave them immediate relief from the formerly oppressive situation.¹⁵⁰ Pound nets were about at the height of their popularity in 1905, and they have steadily declined in use since that time, partly because of the greater ease and mobility of other types of gear. Today there are few pound-netters on the Banks.¹⁵¹

Haul seines became popular again with the advent of power boats. These boats would not operate at one place as in the old haul-seine operations on Albemarle Sound but would go anywhere on the sounds. Like the pound-netters the haul-seiners, or "long netters," would go out for five or six days, returning home on week-ends. Meanwhile a small "run boat" would take the catch to such places as Wanchese every day or so.¹⁵² At present there is only one long netter operating out of Manteo and three or four out of Wanchese.¹⁵³

Mullet fishing was always one of the most important fisheries, and it was conducted mostly with haul seines. Oregon Inlet is said to be practically the northern limit of mullet fishing for profit in the United States, and the fishery was carried on mostly in the lower sounds, principally around Portsmouth and Beaufort.¹⁵⁴ Some crews would operate in the sound and then, when mullet appeared to be running in outside waters, would switch to the beach. When these mullet fishermen were too far from home to commute daily, they would erect temporary dwellings, which in the Beaufort area were generally rounded grass huts.¹⁵⁵ See Fig. 14.

Large haul seines were used in the ocean mullet fishery, and smaller ones were used in the sounds. A small, two-man seine called the "drag net" was used only in the sounds near Beaufort. Gill nets were also used extensively in the mullet fishery.¹⁵⁶ It was said that mullet caught by Portsmouth fishermen had the best reputation in the markets of New Bern, Washington, and Greenville. The reputation of "Portsmouth Mullet" was mostly a matter of tradition and was due in great part to the care that the Portsmouth fishermen took in cleaning them and preparing them for market.¹⁵⁷ Commercial mullet fishing is now largely confined to the Beaufort area.¹⁵⁸

The Cape Lookout whaling ventures have already been noted.¹⁵⁹ Whales and porpoises were caught there by men going out in small boats, but there was no whaling on the Banks

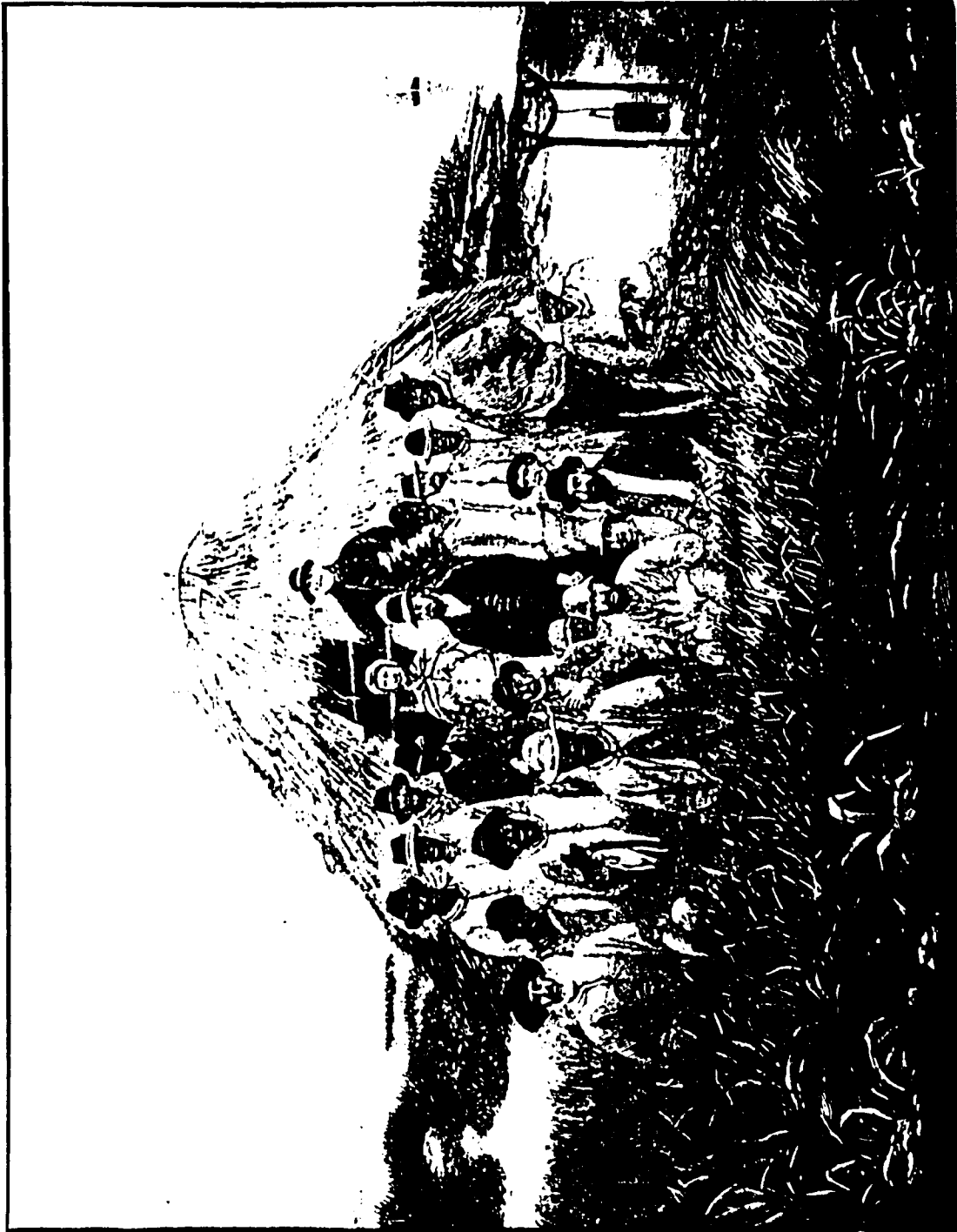


Fig. 14

Reproduction of Plate 149 of Goode et al, Fisheries, Sect. 5, vol. 3, entitled, "The Mullet Fishery. Camp of Mullet Fishermen, North Carolina."

north of Cape Lookout. Porpoises, actually bottle-nosed dolphins, were made the object of a special fishery on the beach near the village of Hatteras. Porpoising had been carried on during the 1790's, and a small factory for trying them for oil was established at Shell Castle.¹⁶⁰ Apparently intermittently between 1810 and 1860 porpoises were taken on the coast from Cape Hatteras to Bear Inlet, just south of Bogue Inlet,¹⁶¹ but after the war they were taken mostly near the village of Hatteras. The method of capture at Hatteras was unique; large strong seines were used.¹⁶² This Hatteras porpoise fishery reached its zenith in the period from 1885 to 1891, and presumably it went out shortly afterwards.¹⁶³ The porpoises were useful only for their oil--the jaw oil being especially valuable.¹⁶⁴

Another important beach fishery was the sturgeon fishery, initiated in North Carolina in 1889 by Capt. A. T. Cann of Delaware.¹⁶⁵ Greatest production came at about the turn of the century. In 1898 some northern fishermen started a gill-net fishery for sturgeon in the ocean at Nags Head. They had such great success that others were encouraged to try gill-netting sturgeon, notably at Corolla, Kitty Hawk, Oregon and New inlets, and Hatteras.¹⁶⁶ Sturgeon fishing dropped off greatly in the next few years, and by the second decade of this century it was no longer important to Dare fishermen. Over-fishing was blamed for the rapid decline of sturgeon fishing. In 1907 it was said: "When the fishermen finally realized the value of the fish, they pursued the fishery so actively that the species was

almost wiped out in a short time and has never been able to reestablish itself."¹⁶⁷

The menhaden¹⁶⁸ industry was really just beginning in New England before the Civil War,¹⁶⁹ and Union soldiers envisioned great possibilities in North Carolina.¹⁷⁰ The first menhaden processing plant in North Carolina was established on Harkers Island in 1865, and the fish were caught at first in gill nets, but later purse and haul seines were used. This plant closed down in 1873, and plans were made to move the equipment to Cape Lookout, which was considered to be a more favorable location, but these plans never materialized.¹⁷¹

In 1866 the Quinnipiac Fertilizer Company of New Haven, Connecticut, sent a party to North Carolina to investigate menhaden possibilities there. This group wintered in Roanoke Sound and is said to have established weirs there for the capture of menhaden, which were quite abundant. However, they were driven off by the natives, "whose jealousy of strange fishermen led them to tear up their weirs." They then located near Cape Charles, Virginia.¹⁷²

Also in 1866 the Excelsior Oil and Guano Company established a plant at Portsmouth. Despite the fact that purse seines and northern fishermen were imported for this fishery, the plant was abandoned in 1869 because of the scarcity and poor quality of the fish in the sounds, the frequency of storms and consequent danger of outside fishing, the hot summer weather which limited their range of operations, and the difficulty of purse-seining in the sounds.¹⁷³

Not heeding these failures, in 1870 the Church Brothers, a Rhode Island concern, established a menhaden factory at Oregon Inlet, but operations were suspended after two seasons because of the difficulties in using the inlet for outside fishing.¹⁷⁴ In 1879 one Capt. I. Kain established a plant at Roanoke Island, but this venture was short-lived because of the scarcity of menhaden in the sounds.¹⁷⁵

Thus it was early shown that a successful menhaden fishery could not be prosecuted in the sounds because the water is usually so shoal that the fish do not congregate there thickly, and purse seines would be difficult to use. Dangers and delays at the inlets often caused the fish to spoil before they reached the factories.¹⁷⁶ The menhaden industry in North Carolina early became concentrated in the Morehead City-Beaufort area and now relies almost entirely upon purse seining in outside waters. The menhaden fishery is no longer the direct concern of the Bankers.

The purse seine has been used successfully in inside waters in only one instance on the Atlantic seaboard--in the capture of the anadromous striped bass, or rock, in eastern Albemarle Sound.¹⁷⁷ The purse seine was introduced into the Roanoke Island rock fishery in 1873 by Samuel Terry of Rhode Island.¹⁷⁸ Purse seines were never exclusively used in the catching of rockfish; pound nets and small haul seines were always more numerous though possibly not as important. In 1952, the last year for which fisheries statistics are available, there were still seventeen purse seines and 111

people employed in the North Carolina striped-bass fishery.¹⁷⁹ The fall "rocking" season has always been important to Dare County fishermen, particularly Roanoke Islanders, and at present Dare accounts for most of the state's catch.

An interesting old type of gear which has lately been found mostly in Currituck Sound fisheries is the fyke net.¹⁸⁰ This net is deemed very effective in the capture of carp,¹⁸¹ but use of fyke nets has been steadily declining even in Currituck County. Currituck has always been the leading producer of carp in North Carolina, but the demand has never been great, and the industry has remained small.¹⁸² Fishermen from the village of Duck formerly sold carp to a buyer from Poplar Branch, but they recently gave up all fishing for carp.¹⁸³ Also caught primarily with fyke nets in Currituck Sound have been catfish, bullheads, and white and yellow perch.

Until recently the most important fish caught in Currituck Sound was the large-mouthed black bass, but this fish is no longer important.¹⁸⁴ Fishermen from the Duck-Colington area have been the only fishermen on the Banks interested in catching eels.¹⁸⁵ Eels are not locally appreciated as food fish but are caught either for use on crab trot lines or for shipment to the North. At present a truck from Norfolk picks up eels at Duck.¹⁸⁶

Two fisheries which have suffered from non-appreciation in the past but which have gained tremendous popularity in this century are shrimp and crabs. Shrimp are now taken mostly in outside waters around Southport and Beaufort, but they are

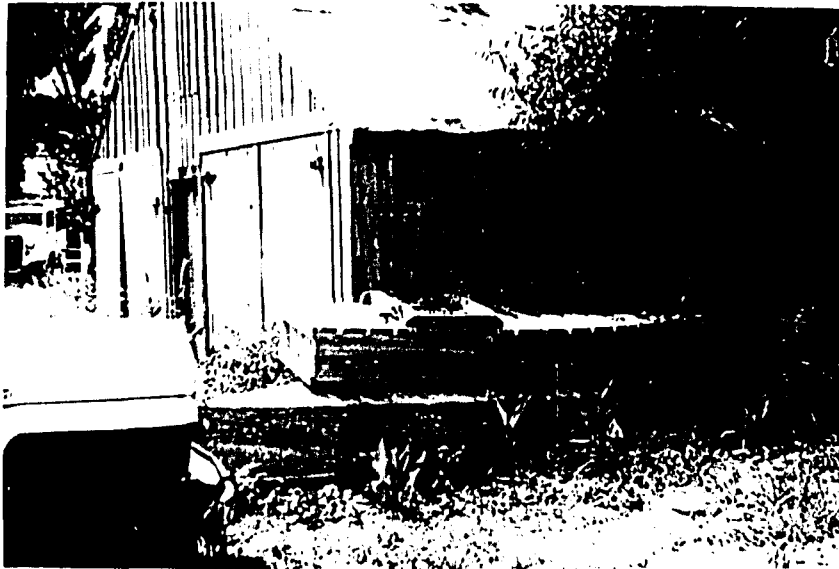


Fig. 15

CARP "CAR" AT DUCK

Someone has set a carp car on an overturned skiff. The carp car is about 10' long, has a pointed bow, flat bottom, and is about 2 1/2 feet wide in the stern. It has slatted sides and top, a solid bottom, and a door on top. Carp were kept in such cars until they were sold.

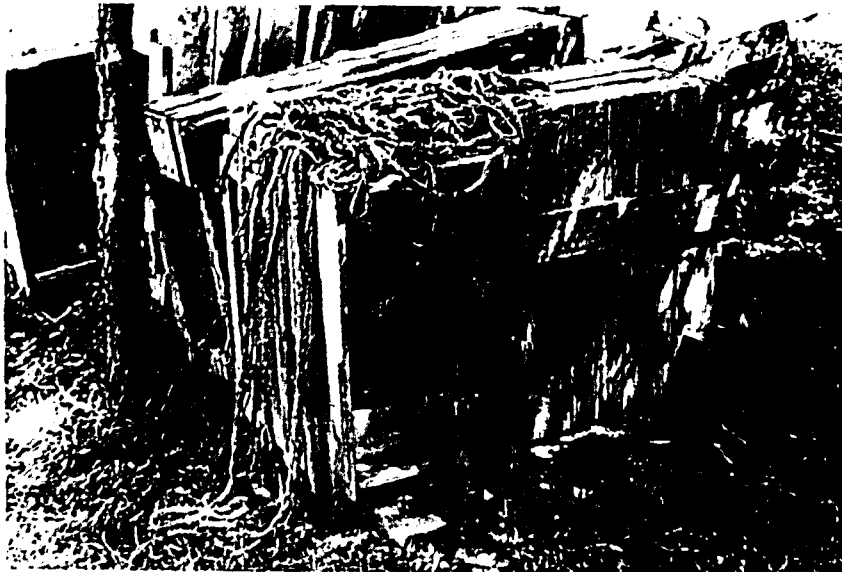


Fig. 16

EEL CARS AT DUCK

The eels are placed in these cars after they are taken from the pots in which they are caught. They are kept in the cars until they are sold. Seven eel cars were stacked here on their sides. Dimensions of an individual car are about $4\frac{1}{2}' \times 3\frac{1}{2}' \times 2'$. Not slatted like the carp car but not tightly made either, the eel car has screens on each end. When in use, the car is in the water.

also profitably taken in Core Sound and lower Pamlico Sound. It was reported that large amounts were taken near Englehard on the Hyde County mainland in 1948, and that point marks the northern extent of shrimp fishing in the United States.¹⁸⁷ Shrimp fishing has only recently become of importance. Earll said in his summary of North Carolina fisheries in the 1880 census that occasionally fishermen out for trout and mullet incidentally got shrimp in their seines but that there was no market and very few were eaten locally.¹⁸⁸ Today, however, shrimp rank second to menhaden in value among individual fisheries in the state,¹⁸⁹ and the reasons for this are the changing public taste and consequent growing demand for shrimp.¹⁹⁰ At present shrimp are largely taken by otter trawls,¹⁹¹ and this gear is so well suited to mass capture of shrimp that its introduction into the shrimp industry in 1908 caused an immediate rise in production.¹⁹² Of importance in shrimping in Core and Back sounds is a special North Carolina gear, the channel net.¹⁹³ The only Bankers who engage in shrimping today are a few Ocracokers.

In 1880 it was reported that crabs¹⁹⁴ were abundant but were not in demand. Fishermen in the Beaufort area accidentally took great numbers of crabs in their seines while fishing for mullet and other fish and considered them a great nuisance because it was difficult to remove them from the nets. Thus the fishermen carried sticks expressly for the purpose of knocking the crabs off the nets. The crabs were then generally thrown away; some were used as manure

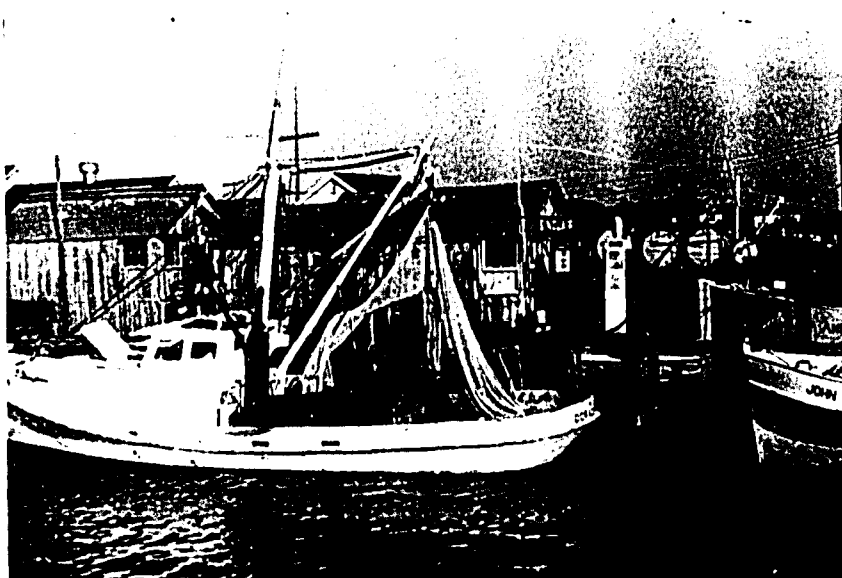


Fig. 17

SHRIMP TRAWLER AT OCRACOKE

Note the "Core Sound" stern.

and few were sold. It was said that "most of the crabs sold in this vicinity are gathered by negro children, who take them on the ebb tide in the little pools of water left on the shore."¹⁹⁵ It was hoped that a market could be established and that crab canneries would then be erected to make use of this resource. It was noted that the trot line was not used in the Beaufort area.¹⁹⁶ The trot line, eminently suited to catching crabs, had long been in use in Virginia and South Carolina and presumably also in the Roanoke Island area.¹⁹⁷ The trot-line is today the most common method of catching crabs in North Carolina,¹⁹⁸ but the crab pot has been of importance ever since its invention in 1938 by B. F. Lewis of Harryhogan, Virginia.¹⁹⁹ Rapid growth in the North Carolina crab industry began in the 1890's²⁰⁰ and has been second only to shrimping in rate of growth.²⁰¹ The North Carolina crab fishery has always been largely subsidiary to the older established industry in Chesapeake Bay. Every year Chesapeake buyers buy in North Carolina until the crab season begins on the Bay, and sometimes in the late summer and fall large quantities of North Carolina crabs are shipped to the Chesapeake to augment the local supply, particularly in periods of scarcity. Statistics show that in years of low production on the Bay, North Carolina yields are high, and also the converse is true. This does not mean, as some think, that a high natural abundance in one region is accompanied by a low abundance in the other, but rather that the natural abundance in the Chesapeake governs the intensity of North Carolina crabbing.²⁰² Carteret County has been the largest producer of crabs since

the 1890's, but crabbing is very important in the Roanoke Island-Colington-Kitty Hawk area. In 1955 it appeared to be the healthiest fishery on Roanoke Island.

Other local fisheries which have suffered from a supposed inferiority to other regions, particularly to the Chesapeake, have been the oyster, clam, and terrapin industries.

The diamond-back terrapin is the only important turtle in North Carolina. Occasionally green turtles, here near the northern limit of their normal range, are taken, but they are commercially insignificant, as are the large loggerhead turtles.²⁰³ The diamond-back terrapin is found in brackish waters along the Atlantic and Gulf coasts from Buzzard's Bay to Texas. It is not found in the sea, and rarely does it ascend rivers beyond the reach of salt water. In general two subspecies have been recognized, the "Carolina" and "Chesapeake" types, but the differences between the two are slight, and both occur in North Carolina and probably in the Chesapeake.²⁰⁴ However, terrapin taken in North Carolina waters, regardless of type, have a somewhat lower market value than those from the Chesapeake. Originally the Long Island terrapin commanded the market premium, but as supplies there became depleted the focus of the industry moved southward, first to Delaware Bay and then to the Chesapeake, whose great supplies have kept this region in first rank for perhaps a century.²⁰⁵ Ever since North Carolina terrapin began to be shipped to outside markets, they have been held to be inferior to those taken on the Chesapeake.

Until 1849 terrapin were taken only for local use in North Carolina, but in that year one J. B. Etheridge sold 4,150 for \$750 in Norfolk and Baltimore.²⁰⁶ This prompted many men, especially Roanoke Islanders, to enter into the business of shipping out the locally plentiful terrapin. Terrapin were never abundant on Hatteras Island and were taken there only for local consumption. They were bountiful in the waters of Pamlico and Roanoke sounds, and the marshes on the south side of Roanoke Island and on the western shore of Pamlico Sound were said to be their favorite breeding grounds.²⁰⁷ The terrapin were either caught by hand, or taken in a cylindrical net called the "terrapin trap," or dredged up with a "terrapin dredge" which was invented by a Roanoke Islander.²⁰⁸ A number of attempts were made to raise terrapin in captivity in "pounds," or "crawls," and the 1880 census reported a four-acre pound on Roanoke Island.²⁰⁹ As Carolina terrapin gained in favor, they could be shipped directly to market, but often the subterfuge had to be employed of sending them to points on the Chesapeake Bay to be reshipped as "Chesapeakes."²¹⁰ Terrapin were intensively hunted, and the supply became quite seriously depleted by World War I.²¹¹ The war and Prohibition combined to curtail drastically the use of this luxury item, and the industry has never recovered. Production in the state is now negligible, and there have been no terrapin hunters on Roanoke Island since before World War I.²¹¹

The hard clam is found from the Gulf of St. Lawrence

to the Gulf of Mexico, and, although it is said to be essentially a southern or warm-water form, the bulk of the production is from Long Island Sound and New England because of tradition and of proximity to the largest population centers.²¹² In North Carolina greatest production is from Carteret and New Hanover counties, followed by Dare and Hyde. Clams are found especially around the inlets. They are taken on the Outer Banks now mostly for personal consumption, and Ocracoke has been the only important center of commercial production on the Banks. In 1877 a cannery was moved from Elizabeth City to Ocracoke to take advantage of the abundant local supply of clams, and two years later they were reportedly employing fifty persons procuring and packing clams and fifty more part-time clammers.²¹³ It is not known when this plant was disbanded. In 1898 one J. H. Doxsee came to Ocracoke from Long Island and established a clam factory on Windmill Point at the entrance to Silver Lake.²¹⁴ Clams were bought from Bogue Sound to Hatteras Inlet and were processed as clam juice, clam chowder, and whole clams. Many of the clams were labeled as originating at Islip, Long Island.²¹⁵ After a few years of success, the clam supply diminished and the plant was moved.²¹⁶ Hard-clam production in North Carolina declined after a peak year in 1902, and although a large figure was reached in 1941, the present production is less than that of 1880.²¹⁷ Almost the entire clam catch is now taken by rakes, used by fishermen wading in shallow water,²¹⁸ and men generally engage in clamming only as a last resort. Great hopes are held for increased production of clams in the

Hatteras-Ocracoke area, but limitations are posed by relative inaccessibility and the comparative inefficiency of the raking method.²¹⁹

In early days oystering was conducted mostly for local use. Northern markets were amply supplied by the abundance of oysters in Long Island Sound, Delaware Bay, and Chesapeake Bay.²²⁰ As early as 1840 oyster cultivation was attempted in the Beaufort region, and in the 1880's there was great interest in taking up bottom for oyster culture, but it has been difficult to get fishermen to respect the rights of those who have taken out leases.²²¹ George Ives really started the commercial oyster business when he began shipping them from the Beaufort-Morehead City area in 1874.²²² In 1889 a scarcity of oysters in Chesapeake Bay led to the invasion of the Carolina Sounds by Chesapeake oystermen.²²³ They introduced the oyster dredge and more-efficient tonging methods.²²⁴ These Chesapeake oystermen were responsible also for discovering and exploiting new beds.²²⁵ However, these Chesapeake intruders tended to "mine" the Pamlico beds. They marketed the North Carolina oysters as Chesapeake oysters and for years used Pamlico Sound as a source of seed oysters for the Chesapeake bottoms.²²⁶ As with crabs, statistics show that the natural abundance of oysters in Chesapeake Bay governs the intensity of oystering in North Carolina.²²⁷ The general trend of production in North Carolina shows a maximum just before the turn of the century and a gradual decline in ensuing years.²²⁸ Although the industry in Pamlico Sound is capable of expanding greatly, there is not sufficient incentive to modernize and centralize the present facilities and to lease large

acreage of oyster bottoms.²²⁹ Oystering was formerly a fairly prominent occupation around Ocracoke Inlet, but the small amount of oystering done there now is mostly for personal or local consumption.

With the exception of seining on the beach, the Bankers have not been much concerned with ocean fishing. The offshore grounds, however, have been partially explored by fishermen from the Beaufort area and from other states. Menhaden fishing has been mentioned. The catch of croakers has increased tremendously since 1920, when New Jersey flounder draggers began pushing into the area to secure croakers in advance of the season.²³⁰ Fish dealers from Hampton and Portsmouth, Virginia, also interested in croakers, then began to dispatch small, shallow-draft, oyster or crab dredge boats, equipped with trawls instead of dredges, down the North Carolina coast. These small boats commonly used Ocracoke as a harbor of refuge. The flounder draggers and dredge boats were unable to extend the croaker fishery far out to sea because of their small size, but in the winter of 1928-1929 several larger vessels from New England fishing ports, equipped to trawl in the deep offshore waters, began coming to the Cape Hatteras area.²³¹ At present, however, the continental shelf is still largely unexplored. It has been said that "at least 60 per cent of the shelf is unknown to the commercial fishermen of the area."²³²

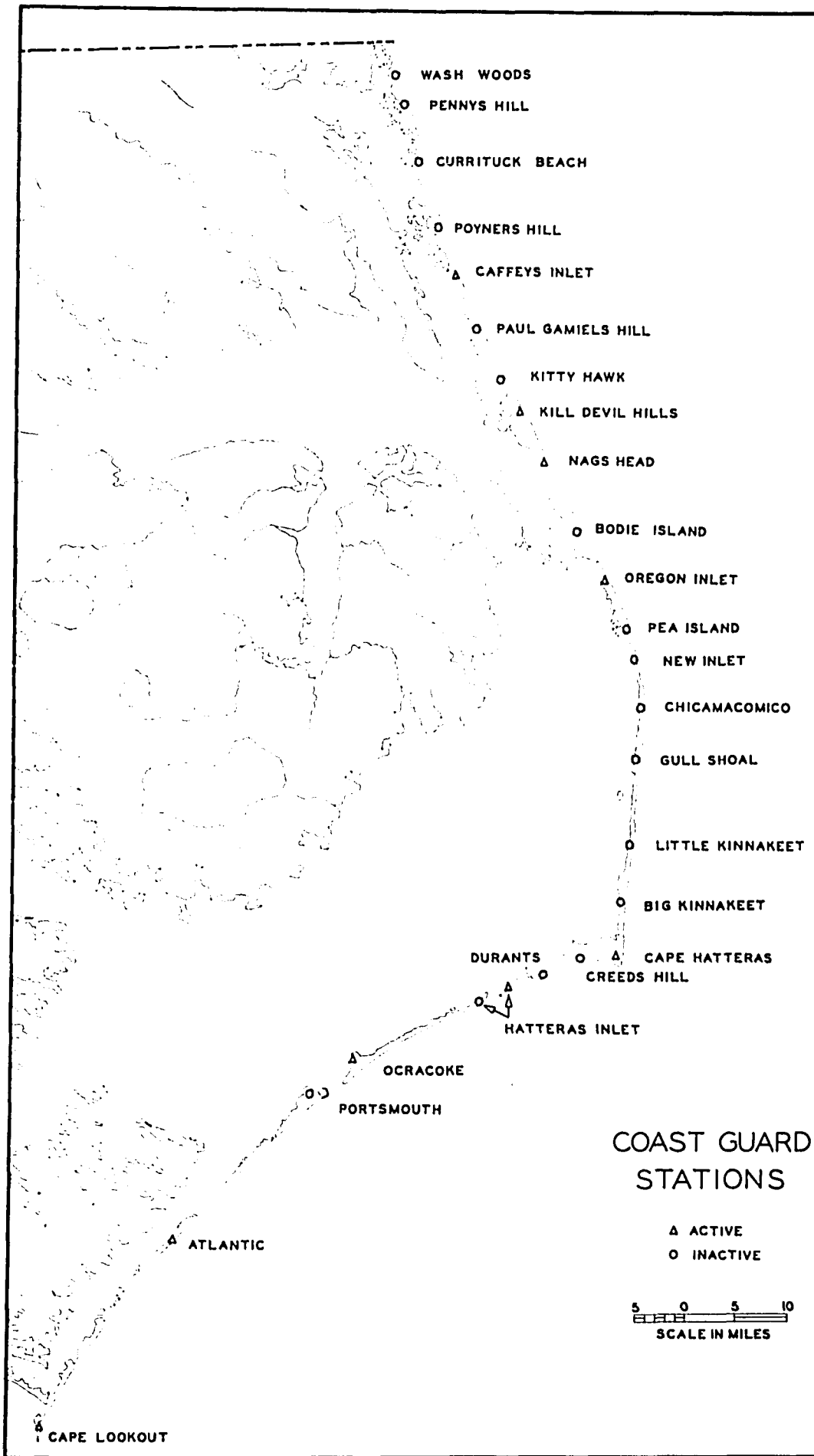
It has been shown that in general the fisheries expanded greatly after the Civil War but have declined in this century. In many cases this expansion was made possible by introduction of new types of gear from the older commercial fishing areas of

Chesapeake Bay and the North. In all cases, improvements in transportation and the introduction of icing²³³ facilitated the growth of commercial fishing. The three decades following the Civil War were times of experimentation; some of these experiments either failed completely or showed that the demand could not be filled as cheaply here as elsewhere. The catch of shad and alewives has declined because of obstruction and pollution of the spawning streams. Whereas the fisheries of the Outer Banks have waned, those of Carteret County have expanded. In general, the great increases in catch of menhaden and shrimp have obscured the decline in other fisheries in the production totals. It is natural that the Banks fisheries should decline. With introduction of larger and more efficient boats and gear and with centralization of packing and shipping facilities, the Banks, with their inadequate harbors, display no advantages in the modern fishing picture. Fishing on the Banks has declined as alternative employment opportunities have become available.

Sport fishing has taken up some of the slack in the decline of commercial fishing. Most of the fishermen who take out sportsmen also use their boats for commercial fishing. Boats used for angling are kept more attractive than boats used only for fishing. At present there are few charter boats available which are equipped for outside, offshore, and Gulf Stream fishing.²³⁴ Some of the Roanoke Island boats used for angling are kept at Wanchese and at Dyke's Creek, on the south side of the road as it leaves the island to cross Roanoke Sound, but many of them, together with boats from Nags Head and Kitty Hawk, go to the Oregon Inlet Fishing Center to await customers. The only other places where

boats are available for angling are the villages of Hatteras and Ocracoke. Most of the sport fishing is done in the sounds and inlets or just offshore, but the Gulf Stream has a growing popularity, largely because of the belief that tropical game fishes, such as blue marlin and bluefin tuna, may be present there in great numbers, but they may be there as stragglers or at too great a depth.²³⁵

Government service provided employment for an increasing number in the modern period. In the Federal Period virtually the only government employees on the Banks were those few who tended the lighthouses. In 1875 the last lighthouse on the Banks, the Currituck Beach Light, was built at Corolla.²³⁶ The Diamond Shoals Lightship, which normally carried a crew of fifteen, was placed in position in 1897 on the dangerous shoals near Cape Hatteras.²³⁷ Most important of all were the Life Saving Stations which were established beginning in the late 1870's to provide more efficient and better equipped service to vessels in distress. As the most dangerous section of the Atlantic Coast, the area between the Virginia line and Cape Lookout had a total of twenty-five stations. In many cases the Life Saving Stations were the most important single factor in the rise in importance and size of certain villages.²³⁸ In 1915 the Coast Guard was formed by a merger of the former Revenue Cutter and Life Saving services, and in 1939 the Bureau of Lighthouses was placed under the Coast Guard.²³⁹ The improvement of communications and navigation instruments has made most of the Coast Guard stations unnecessary. Some were inactive before World War II, several have been decommissioned since the war, and at present there are tentative plans



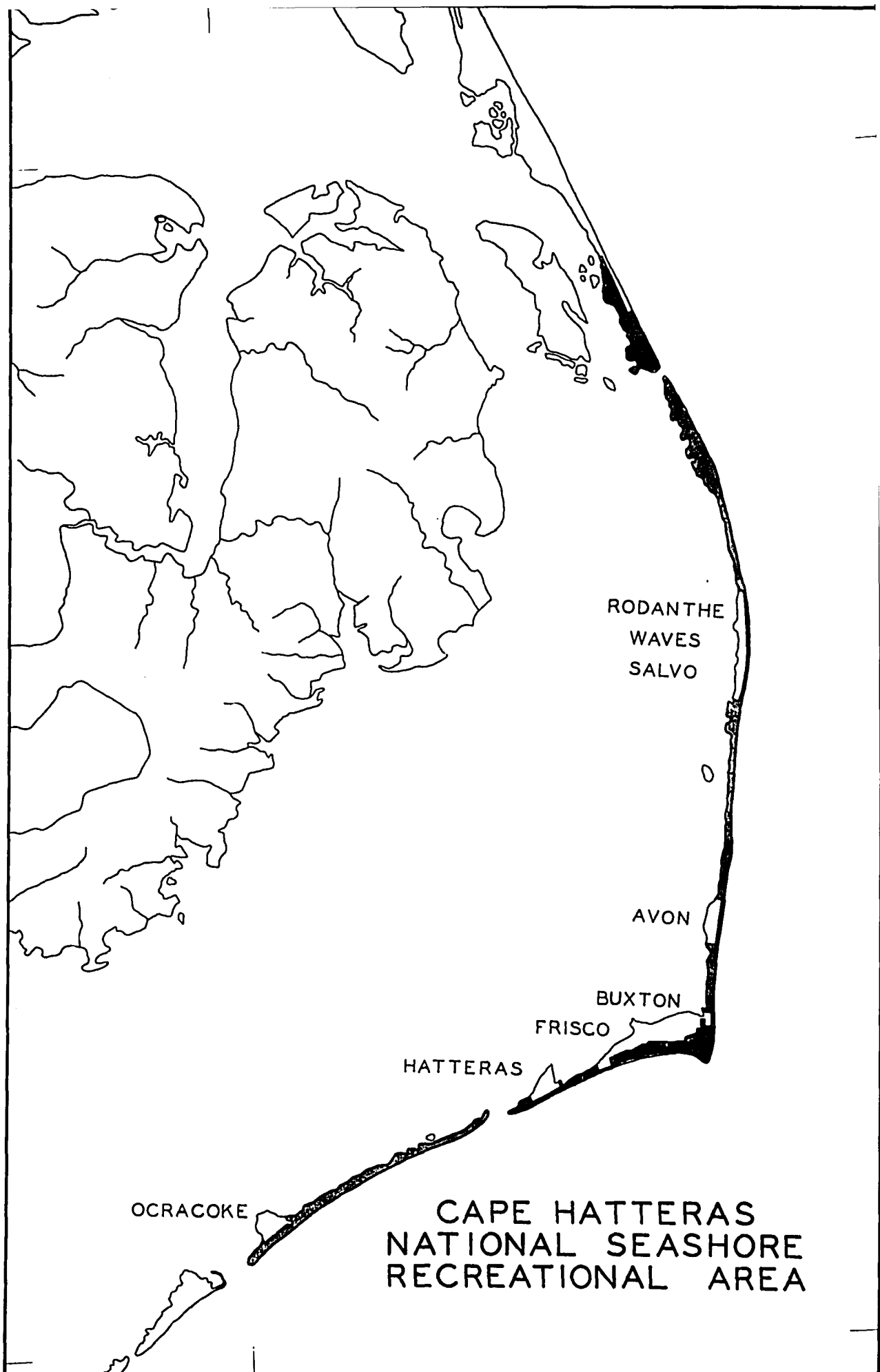
to discontinue the Nags Head and Atlantic stations.²⁴⁰

In 1870 only about two per cent of the jobholders on the Banks were in government service. The percentage jumped to seven per cent in 1880 after some LSS stations were established, and it continued to rise in the ensuing decades. In 1920 and 1930 about one-fourth of the jobholders were in government service, and in 1940 the percentage reached an all-time high, when at least thirty-six per cent of those employed on the Banks were paid by the U. S. Government.²⁴¹ This was largely due to the great number of jobs created by the WPA, CCC, and NYA activities in the area, mostly in connection with the dune-building and grass-planting. The percentage of government workers was about fifteen per cent in 1950 and should decline still further as Coast Guard stations are decommissioned.²⁴² The growth of the number of government workers was followed naturally by an increase in pensioners.

The Federal activities on the Banks in depression days are very interesting. It was thought that the Banks had become seriously deforested and that drifting sands were closing inlets and threatening settlements and fisheries. Thus it was decided to establish a large Federal project to be supported by emergency funds with the State of North Carolina as sponsor. Fifteen hundred workers were recruited, and operations were begun over more than 125 miles of coastline. Soon after the inception of the project, administration was invested in the National Park Service.²⁴³ Six CCC camps were established: Camp Corolla; Camp Duck; Camp Wright, on the north tip of Roanoke Island; Camp Rodanthe; Camp Hatteras, near Frisco; and Camp Ocracoke, at about

the midpoint of Ocracoke Island.²⁴⁴ It was proposed that the National Park Service rehabilitate the Banks from the Virginia line to Ocracoke Inlet and also the north end of Roanoke Island and that this area would become a sort of national park, called Cape Hatteras National Seashore. In all, 600 miles of sand fences were erected in the creation of dunes along 115 miles of beach. Dunes were built only half the length of Ocracoke because of "shortage of funds and conflicting programs for the future development of the island."²⁴⁵ Almost 142 million square feet of grassing was done, and more than 2,500,000 seedlings and shrubs were planted.²⁴⁶ As sand binders, mostly native grasses, such as sea oats, American beach grass, and cord grass, were used. The introduced Bermuda grass proved to be the most expensive to plant.²⁴⁷ The dune-building and grass-planting projects are regarded as highly successful. They were also important in employing numerous Bankers and in paving the way for the present Cape Hatteras National Seashore Recreational Area. The Recreational Area was finally established in January, 1953, and covers roughly the area of the Banks from Whalebone Junction to Ocracoke Inlet, excluding, of course, the villages (see map, Plate VI).²⁴⁸ Naturally, ownership of this area by the Park Service prevents the expansion southward of the Nags Head resort development. Since 1941 the National Park Service has operated Fort Raleigh on Roanoke Island as a National Historic Site.²⁴⁹ The Wright Brothers National Monument at Kill Devil Hills, erected in 1932, also comes under the Park Service jurisdiction.²⁵⁰

The tourist business has caused or accelerated the declines in other activities and in the future will account for an



RODANTHE
WAVES
SALVO

AVON

BUXTON

FRISCO

HATTERAS

OCRACOKE

CAPE HATTERAS
NATIONAL SEASHORE
RECREATIONAL AREA



Fig. 18

VIEW FROM THE TOP OF CAPE HATTERAS
LIGHTHOUSE LOOKING NORTHWARD

Taken January, 1953. Note the grass-
covered artificial dunes built by the
WPA.

--Reproduced through the courtesy
of the North Carolina News Bureau,
Department of Conservation and
Development, Raleigh

increasing percentage of the jobholders. The rise of the building trades has been noted. The number of retail establishments will expand, and many will be only seasonally operated. Still regarded by many Bankers as a mixed blessing, the summer flood of tourists directly or indirectly raises the incomes of all local residents and enhances land values. It was noted that the first beach cottages were at Nags Head. Subsequently the development was largely northward, and there are now cottages almost as far north as the beach opposite Duck. Presumably this march will continue. The sound-side cottages were forsaken in the rush for the beach, but now there is a return of attention to the sound shores. The area between sea and sound will see increased development, and this will naturally be accompanied by the construction of many east-west roads. The old beach cottages were all two-story, unpainted, shingled structures. The newer ones are of various sizes and shapes, usually one-story, painted clapboard houses, and one of the modern building fads has been for flat-topped cement-block structures. Mostly built since World War II, they have not received the test of direct hurricane onslaught, and probably many of them would be damaged severely in a big storm.

The population of the Banks has not risen greatly since 1900. See Table 1.²⁵¹ Emigration in the last fifty years has almost kept pace with normal expansion of families. The 1940 census year should be treated as a typical because of the great number of workers imported for the various projects. The totals are not so important as the changes in each population district. Each of the villages should be examined in turn to determine the causes



Figs. 19 and 20
OLD STYLE BEACH COTTAGES AT NAGS HEAD

POPULATION 1870-1950

Townships	1870	1880	1890	1900	1910	1920	1930	1940	1950
Portsmouth	341	222	204	150	182	143*	104	42	14
Ocracoke	368	400	466	548	565	587	547	525	509
Hatteras	673	821	906	987	1041	1115	1132	1201	1046
Kennekeet	599	631	793	842	644	712	663	806	576
Nags Head	1000	1104	1296	1884	2069	1881	1949	2547	2422
Atlantic	320	332	504	393	473	398	595	504	665
Total	3301	3510	4169	4804	4974	4836	4990	5625	5232

* estimate

Table I

of change.

Portsmouth Township is the only district to show a steady decline since 1870. The village of Portsmouth²⁵² was not the only village to diminish in size; others have done so, but their reduction was compensated by a rise elsewhere in the same district. Portsmouth's fall has been rather steady since the Civil War. The reason for the anomalous 1910 figure is not known; perhaps the village was enjoying an unusual run of good fishing years. The decline can be attributed to the abandonment of the inlet by commerce, to the general decline in fishing, and to the comparative advantages of Ocracoke. In 1955 Portsmouth's permanent population was eighteen. It should be expected to rise in future years because all the lots and empty houses have been bought up in anticipation of increased tourist business. Portsmouth offers almost no services at present. There is no school, and church services are rare. All goods must be imported. The only active non-residential structure is the post office.

Ocracoke's²⁵³ population has not changed greatly since 1900. It seems that the village area is just about saturated with a population of 500. The decline since 1920 probably follows the decline in fishing. Ocracoke's population will rise with the paving of the road to Hatteras Inlet, the provision of free ferry service across Hatteras Inlet, and the subsequent invasion of the island by greater numbers of tourists.

The village of Hatteras²⁵⁴ was the largest village



Figs. 21 and 22
HOUSES AT PORTSMOUTH



Fig. 23
PORTSMOUTH HOUSE



Figs. 24 and 25

OCRACOCKE HOUSES

These are reputed to be just about the two oldest houses now standing in Ocracoke. Like so many Ocracoke houses, they were difficult to photograph because they were almost completely surrounded by foliage.



Fig. 26
OCRACOKE HOUSE



Fig. 27

OCRACOKE HOUSE

The palm, a Washingtonia,
was introduced and is the
only one on the island.
Road is part of Ocracoke's
ten-foot-wide concrete strip.

on the Banks until 1940, when it was surpassed by Wanchese, and in 1950 Hatteras was a close third behind Wanchese and Manteo, the new leader. Any decline in fishing should be made up by rise in the tourist business. Hatteras' population can be expected to rise slowly, although the Roanoke Island towns and even Buxton will outstrip it in relative gains. The village of Hatteras was incorporated in 1931.²⁵⁵

The settlement of Frisco was first named Trent, but the new name, said to have been inspired by San Francisco, came into being when the post office was established in 1898.²⁵⁶ Frisco's population was listed separately first in the 1910 census, and in that year the population was 205. In 1930 the population was 149 and in 1940, 126. Presumably it suffered as fishing declined, but in the future it may figure in the tourist boom. Frisco, never a compact settlement, is so close to Buxton that the separation between the two will become less and less perceptible.

Buxton, called simply The Cape before the name Buxton was given to the post office in 1882,²⁵⁷ was never important as a fishing community, and it has risen steadily in population as activities began to be centralized at the Cape. From a population of 315 in 1910, the village rose to 420 in 1940. The Hatteras Island doctors live at Buxton, and the Cape Hatteras Health Center there serves the whole island. In 1955 all the island schools were merged to form the new school at Buxton. The village is favored by being near the island's greatest tourist attraction, the Cape itself. The lighthouse

and the newly opened maritime museum aid in attracting visitors. The greatest number of motels and filling stations on the island are located at Buxton.

Avon, called Kinnakeet before 1883,²⁵⁸ reached probably its greatest size in 1940 with 471 inhabitants, but it has since declined because of the fishing and the decommissioning of the nearby Coast Guard stations. Although Avon is now connected by paved road with the highway, it is the only village on the island through which the highway does not run. The village has a hotel but little else to attract tourists. If Avon's population increases, it will not match Buxton in rate of growth.

Little Kinnakeet, or Little Avon, was a small settlement in the first hammock north of Avon. In 1862 Little Kinnakeet had about ten houses, but by 1902 it appeared to have only about four.²⁵⁹ The Little Kinnakeet Coast Guard Station was the only reason for prolonging the existence of the settlement, but the station outlived the settlement. In 1955 some Avon informants said that Little Kinnakeet had never been larger than twenty houses and that it finally died when the last resident moved to Avon "twenty-five to thirty years ago." Little Kinnakeet is the only village on the Banks to pass entirely out of existence.²⁶⁰ Its death was a natural, lingering one; it fell victim to the comparative advantages of Avon, only three miles away.

Salvo,²⁶¹ once named Clarks or Clarksville, is about twelve miles north of Avon. It grew from 77 inhabitants in 1910 to a population of 98 in 1940, and the latter figure



Fig. 28

HOUSE AT BUXTON

Note the shake roof.



Fig. 29

HOUSES AT PETERS DITCH, AVON

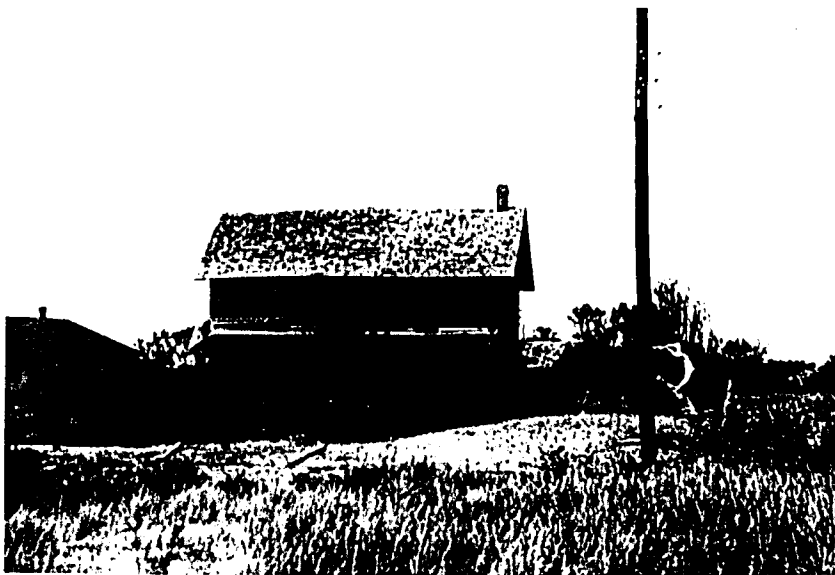
Peters Ditch has been
dredged to form a T-shaped
harbor.

probably represents its maximum. A fishing village, Salvo offers little cause for tourists to stop.

Two miles north of Salvo lies Waves, formerly known as South Rodanthe, South Chicamacomico, or Southern Woods. It was never listed separately in the census but was included with Rodanthe. The latter is the larger of the two settlements and has been the more important. Rodanthe,²⁶² formerly North Rodanthe, North Chicamacomico, or Northern Woods, serves as a pickup point for fish buyers. After 1936, when the Coast Guard dredged the artificial harbor at Rodanthe,²⁶³ the boat from Globe Fish Company in Elizabeth City would stop there to pick up fish brought in by the fishermen of Rodanthe, Waves, Salvo, and even Avon. Before 1936 pickups were made at the small fishhouses which were located one to three miles out in the sound.²⁶⁴ The Globe run boat no longer calls at Rodanthe. Instead, Globe has a commission buyer there, and he trucks the fish to Elizabeth City.²⁶⁵

The village of Nags Head was formerly entirely on the sound side.²⁶⁶ Very few dwellings remain at the site of the original Nags Head. The post office, stores, and churches, as well as most of the year-round population, are found along the highway on the beach. The population of the village was 39 in 1930 and 45 in 1940. Nags Head was incorporated in 1923²⁶⁷ but has since been disincorporated. The sound-side location lost its importance very soon after the Wright Memorial Bridge was erected and the ocean highway built.

The village of Kill Devil Hills, incorporated in 1953,²⁶⁸ is a recent development and is inhabited by the permanent residents



Figs. 30 and 31
HOUSES AT WAVES

along the ocean highway. The village is entirely concerned with the tourist business.

Colington is a discontinuous settlement stretched along the road on Colington Island.²⁶⁹ The population of Colington would also be the population of the island. It had 132 residents in 1920 and 162 in 1930. A fishing community, it now has a paved road but no tourist facilities.

The village of Kitty Hawk has traditionally been on or near the northeast shore of Kitty Hawk Bay, but it now includes the former settlement of Otila on Currituck Sound.²⁷⁰ Kitty Hawk had a population of 275 in 1930 and 296 in 1940.

Duck is a settlement of comparatively recent origin.²⁷¹ Its importance as a fishing and hunting center has declined, and the nearby Paul Gamieles Hill Coast Guard Station has been discontinued. Duck had 120 residents in 1930 and 129 in 1940. The asphalt road ends at Duck and just north of the village is a Navy rocket range.

Corolla probably had its beginning when the Currituck Beach Light and the LSS stations were erected in the vicinity. The stations have been closed, and the light is now automatic and is checked weekly by a crew from Caffey's Inlet Coast Guard Station. No figures are available for the population of Corolla, but it is said that at one time thirty-five families lived there.²⁷² In 1953 it was estimated that twenty-two families lived on the Banks from the Virginia line to and including Corolla, and most of them were in Corolla.²⁷³

The Roanoke Island settlements have undergone the



Fig. 32

HOUSE AT KITTY HAWK

This is another example of the typical house of the region--2-story, one-room-deep, with end chimneys. The appendage is detached.

greatest changes in the modern period. There were few houses at the site of what is now Manteo until 1870, when Dare County was formed. The site on Shallowbag Bay was selected to be the county seat and was named Manteo.²⁷⁴ Incorporated in 1899,²⁷⁵ the village had 312 inhabitants in the 1900 census. The population has grown steadily and in 1950 reached the figure of 635, which makes Manteo the largest town on Roanoke Island and the Banks. If Manteo were to include the areas, such as the Negro section called California, which have grown up outside of the corporate limits of the town, it would be a great deal larger. From its beginning Manteo has been the most diversified in function of all the Banks villages.

An interesting old settlement on Roanoke which is now nearly defunct is Skyco on Croatan Sound.²⁷⁶ The post office was established in 1892 and discontinued in 1913. In 1882 the Norfolk and Southern Railroad reached Elizabeth City and entered into a contract with the Old Dominion Company for the latter's boats to run in connection with the railroad from Elizabeth City to New Bern. The steamer Neuse called daily at the Old Dominion wharf which was erected at Skyco.²⁷⁷ Skyco became a pickup point for the fish taken in the region.²⁷⁸ Presumably there were never many houses at Skyco, and the importance of the place was taken away when the Old Dominion Company discontinued service about 1913. In 1924 it was said that "Skyco is the name rather of a region than of a place, as only three or four houses are there, and one would pass through without probably asking if it had any name."²⁷⁹ In 1955 it was observed that all remained to indicate Skyco's former glory were

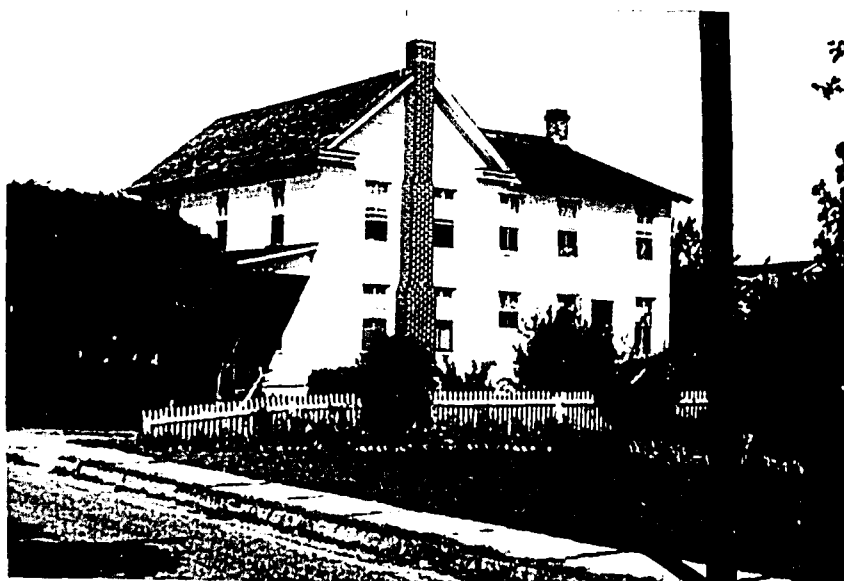


Fig. 33

HOUSE IN MANTEO

This house also conforms to the type which prevails in the area. Note the "Umbrella" tree, which is very popular in Manteo. Umbrella tree (Melia azedarach) is known as the Chinaberry tree in the Deep South and is there generally associated with Negro homes. This association of the tree with Negroes is unknown on Roanoke Island. The Umbrella tree is rare on the Banks because the wood is brittle and breaks easily during storms.

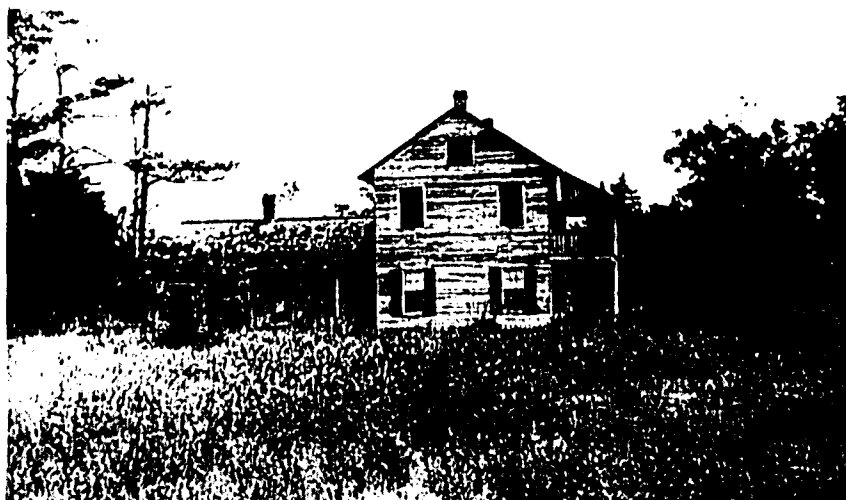


Fig. 34

HOUSE AT SKYCO

This house stands about thirty yards from the water's edge. The rear appendage is separated from the house by a breezeway or dog-trot.

-- Taken by F. B. Kniffen

an abandoned ice house and the remains of a pier. Only the house on the very shore was inhabited (Fig. 34). Its owner said that until about 1950 a crab plant was operated at Skyco.

Wanchese,²⁸⁰ a rambling settlement in the southern part of Roanoke Island, became an important fishing center in the last part of the 19th century. It was aptly stated in 1924 that "Wanchese is a thickly settled country community, or neighborhood, rather than a village, and the name would spread over quite an area."²⁸¹ The population of Wanchese has not changed greatly in the last half century, and in 1950 it was 625. Having depended almost entirely upon fishing in the past, Wanchese may now find it difficult to discover a new livelihood to match the decline in fishing.

NOTES

1. See Chapter 4, notes 25 and 30.
2. S. W. Stanton, Steam Navigation on the Carolina Sounds and the Chesapeake in 1892 (Salem, Mass.: The Steamboat Historical Society of America, 1947), 12.
3. Ibid., 15.
4. RSW, vol. 2, part 2 (Washington: GPO, 1894), 1016.
5. RSW, vol. 2, part 2, 1889, 1118-1124; RSW, vol. 2, part 2, 1891, 1341.
6. RSW, vol. 2, part 2, 1893, 1364-1366; RSW, vol. 2, part 2, 1894, 1014-1016.
7. RSW, vol. 2, part 2, 1894, 1016.
8. Ibid., 1015-1016.
9. RSW, vol. 2, part 2, 1893, 1365.
10. Ibid., 1365-1366.
11. RSW, vol. 2, part 2, 1895, 1310.
12. RSW, vol. 2, part 2, 1896, 1098. Also see Annual Reports of the War Department for the Fiscal Year Ended June 30, 1897. Report of the Chief of Engineers, part 2, 1897, 1386. This is the new title of the Corps of Engineers reports. Hereafter cited as RCE.
13. RCE, part 2, 1897, 1387. See RCE, part 2, 1898, 1238, for commercial statistics for Ocracoke Inlet, 1891-1897. The statistics show a three-fold increase in commerce as a result of dredging. This increase was partly at the expense of Hatteras Inlet. Reports of the next few years following 1897 indicate that the commerce of Ocracoke Inlet fell off greatly after that year.
14. RCE, part 2, 1899, 1488.
15. RCE, part 2, 1901, 1484.
16. Ibid., 1511-1540.

17. RSW, vol. 2, part 2, 1874, 85.
18. RSW, vol. 2, part 2, 1882, 1128.
19. RCE, part 1, vol. 1, 1950, 621-622; "Channel from Manteo to Oregon Inlet, N. C.," 81st Congress, 1st Session, House Document 310, 1949.
20. H. F. Taylor et al, Survey of Marine Fisheries of North Carolina (Chapel Hill: University of North Carolina Press, 1951), 113-114.
21. J. H. Pratt, comp., "Report of the Fisheries Convention Held at New Bern, North Carolina, December 13, 1911," North Carolina Geological and Economic Survey, Economic Paper, 29, 1912, 81.
22. "Beach Erosion at Kitty Hawk, Nags Head, and Oregon Inlet, N. C.," 74th Congress, 1st session, House Document 155, 1935, 15-17. Hereafter cited as "Beach Erosion." "North Carolina Shore Line, Beach Erosion Study," 80th Congress, 2nd session, House Document 763, 1948, 10. Hereafter cited as "North Carolina Shore Line." C. E. Feltner, Beach Erosion in North Carolina, N. C. State College Record, vol. 47, no. 4 (January, 1948), 11.
23. The results of the meetings are found in the Fisheries Commission publication, Additional Inlets. Edenton fishermen wanted the new inlet cut through at Nags Head or Kitty Hawk; Roanoke Islanders asked that it be located at Kitty Hawk or at the site of the former New Inlet; Core Sounders preferred the site of former Drum Inlet; and Hatteras fishermen from Avon to Hatteras village petitioned that it be dredged through at the "Haulover" or Cape Channel. This last-named place was the site of the inlet at the Cape which was shown on the White map and which may have existed until after 1657, when it was shown on the Comberford map. It may be that not all sections of the Comberford map were of equal reliability; that is to say, parts of the map may not have represented the current situation in 1657 but may have been copied from early (White?) and out-moded surveys. In that case the Cape inlet and Cape Kenrick (See Chapter 3, note 94) may not have persisted until 1657.
 "Haulover" is an interesting and important term. Although it locally refers, as in the above case, to a particular place, it is actually a generic term meaning a portage or place over which small boats have to be hauled or carried, a narrow isthmus. See McMullen, op. cit., 126. The name is used on the Banks especially for sites of former inlets. As in the case of the Cape haulover, the Bankers might not know that the site was formerly an inlet; it is just that sites of former inlets fit the definition of "haulover."

Tatham, describing part of his survey between Cape Fear and Cape Lookout, said concerning Browns Inlet:

"This Inlet is 4 miles from Bear Inlet, and from thence to the haul over, along sandy bleak banks, to where Sandy-Inlet formerly was is called five . . . Here we discharged our Bogue Pilot, and prepared for hauling over our boat" (Tatham, op. cit., 30).

Before the inlet right at Cape Lookout named The Drain reopened in 1933, the site was called a "haulover." See N. C. Department of Conservation and Development, Seventh Biennial Report, 1938, 27.

24. "Beach Erosion," 15-17; "North Carolina Shore Line," 21; and Feltner, op. cit., 11. This unsuccessful venture repeated the fruitless attempt to reopen Roanoke Inlet in 1856-1857. See Chapter 4, note 12. Failures elsewhere in the United States to open inlets are mentioned by E. I. Brown, "Inlets on Sandy Coasts," American Society of Civil Engineers, Proceedings, vol. 54, part 1 (February, 1928), 514.
25. N. C. Department of Conservation and Development, Second Biennial Report, 1928, 86.
26. "Beach Erosion" and "North Carolina Shore Line." Full references in note 22.
27. "Beach Erosion," 16; "North Carolina Shore Line," 10.
28. Letter to the writer from David Stick, February 7, 1956.
29. "Beach Erosion," 31.
30. "Channel from Pamlico Sound to Rodanthe, N. C.," 76th Congress, 1st session, House Document 234, 1939, 5.
31. RCE, part 1, vol. 1, 1947, 640-641; RCE, part 1, vol. 1, 1950, 624-625.
32. RCE, part 1, 1930, 618-619; RCE, part 1, 1931, 612-613; "Silver Lake Harbor, N. C.," 76th Congress, 1st session, House Document 325, 1939, 2-3, 7.
33. "Silver Lake Harbor, N. C.," 13.
34. RCE, part 1, vol. 1, 1947, 651.
35. RCE, part 1, vol. 1, 1948, 719.
36. RCE, part 1, 1937, 471-472.
37. RCE, part 1, vol. 1, 1940, 562; RCE, part 1, vol. 1, 1948, 717; RCE, part 1, vol. 1, 1952, 480-481.

38. "Channel from Pamlico Sound to Avon, N. C.," 76th Congress, 1st Session, House Document 316, 1939.
39. RCE, part 1, vol. 1, 1947, 642; RCE, vol. 2, 1955, 292.
40. RCE, part 1, 1910, 330.
41. RCE, part 2, 1912, 1735; RCE, part 2, 1917, 2277-2279; RCE, part 1, 1930, 601; RCE, part 1, 1934, 349; RCE, part 1, vol. 1, 1949, 622-623.
42. RCE, part 1, vol. 1, 1948, 705-707; RCE, part, vol. 1, 1953, 453-455.
43. RCE, part 1, vol. 1, 1949, 658.
44. RCE, vol. 2, 1955, 305.
45. "Cape Lookout, N. C.," 62nd Congress, 2nd Session, House Document 528, 1912, 2-7, 11, and 24.
46. RCE, part 2, 1914, 1988; RCE, part 2, 1915, 2358.
47. "Channel from Back Sound to Lookout Bight, N. C.," 75th Congress, 1st Session, House Document 251, 1937, 15.
48. See RCE, 1921-1930.
49. "Channel from Back Sound," 2.
50. A. C. Brown, op. cit., 57ff.
51. Ibid., 65-66; RCE, part 2, 1900, 1774.
52. "Intracoastal Waterway: Boston, Mass., to Beaufort, N. C. Section," 62nd Congress, 2nd Session, House Document 391, 1912, 100-101. Brown, op. cit., 67, shows this comparison by freight tonnage figures for three dates.

	Dismal Swamp Canal	Albemarle and	
1880	6,731 tons	400,000	Chesapeake
1889	78,211	316,793	
1906	340,135	95,269	

The Corps of Engineers report gives figures for 1906 which differ slightly from Brown's. It gives 388,488 tons for the Dismal Swamp Canal and 100,000 (apparently an estimate) for the Albemarle and Chesapeake. See RCE, part 2, 1907, 1213, 1215.
53. Brown, op. cit., 68; RCE, part 2, 1913, 1909-1910.
54. Brown, op. cit., 69; RCE, part 1, 1929, 538.
55. See note 16 above.

56. "Intracoastal Waterway," 125-126.
57. RCE, part 2, 1909, 1282; RCE, part 2, 1911, 1536, 1539.
58. See Chapter 4, note 5.
59. RSW, vol. 2, part 2, 1890, 1127.
60. For example, see RCE, part 2, 1907, 1232.
61. RCE, vol. 2, 1955, 291.
62. H. I. Chapelle, American Small Sailing Craft: Their Design, Development, and Construction (New York: W. W. Norton and Co., Inc., 1951), 3, 38.
63. Interview with Harry Davis, Director of N. C. State Museum, Raleigh.
64. Interview with Mr. Davis.
65. There are a great many names for this boat. A Manteo informant called it the "Dare County shad boat" or "Spritsail shad boat." Chapelle, op. cit., in the explanation under the photograph between pp. 174 and 175, records the names "North Carolina shad boat," "Albemarle Sound seine boat," and "Croatan Island boat." Since there is no Croatan Island, possibly he meant to say Croatan Sound. On p. 257, Chapelle says, "The sound boats were employed in the shad fishery, which used seines. Hence, they are usually called 'North Carolina shad (or seine) boats,' and are also called after the sounds on which they were found - Albemarle, Pamlico, Currituck, Core, and Croatan." Probably they were never called Core Sound boats, because that name refers to rounded-stern boats, generally sharpies and dead-rise skiffs, and not to shad boats.
Despite its name, the shad boat was a multi-purpose boat.
66. Chapelle, op. cit., 257-260.
67. The Creefs were originally from East Lake, a small settlement on the Alligator River in western Dare County. Mr. Dough did not know whether the first shad boat was built in East Lake or in Manteo.
68. Chapelle, op. cit., 46, says that the name "sharpie," "came into use at least as early as 1857 in America. It appears probable that the name was created to distinguish between the sharp-bowed flat-bottomed skiff and the scow; so 'sharpie' meant 'sharp-bowed'...Before 'sharpie' became popular, the name 'flatiron skiff' appears to have been rather widely used as a name for the rowing-sailing, flat-bottomed, and sharp-bowed skiff. The 'flatiron skiff,' as a name, was in use as late as 1884 in some areas."

69. Ibid., 122.
70. Ibid., 122-124.
71. Ibid., 306-309. See also Brewington, Chesapeake Bay, 65-66. The V-bottom is called the "Skipjack" on the Chesapeake but not in North Carolina.
72. Chapelle, op. cit., 259, 305.
73. Interview with Horace Dough.
74. M. Davis, op. cit., 115; N. C. Guide, 296-297.
75. Map Division, Library of Congress.
76. War Department, Corps of Engineers, List of Bridges over the Navigable Waters of the United States. Revised to January 1 1935 (Washington: GPO, 1936), 124-125.
77. Outlaw, op. cit., [40]7.
78. N. C. State Highway Commission, "(Map) Dare County, First District," 1930.
79. RCE, part 1, 1930, 601; RCE, part 1, 1931, 594.
80. Interview with Capt. Martin Johnson, captain of the Trenton, Aug. 4, 1955.
81. "Foresee Oregon Inlet Bridge in 5 Years," The Coastland Times (Manteo), Aug. 5, 1955, p. 1, col. 7, and p. 5, cols. 1 and 2.
82. Interviews with E. W. Etheridge, Manteo, Aug. 9, 1955, and Lloyd Wescott, Manteo, Aug. 10, 1955.
83. Interview with Clifford Wade, Hatteras, Aug. 15, 1955.
84. The age of this remarkable vine is unknown, but it may antedate the entrance of whites into the area.
 Dr. William C. Etheridge, native of Roanoke Island and Dean Emeritus of the College of Agriculture of the University of Missouri, has written the following about Mother Vineyard
 "Muscadine varieties, including especially the Scuppernong, are more numerous and abundant in eastern North Carolina than in other places; the vines there are larger and are often known to have lived to a greater age in undiminished yield. These facts indicate the North Carolina coastal area as the environment to which the Muscadines are generally best suited, and further they are presumptive evidence that this was the place in which these grapes first reached a stage of natural development comparable with their present forms. Such a phase must have occurred at a time too remote for even a guess of the approximate period..."

The first title to the land which includes the site of Mother Vineyard was granted to Peter Baum. This was previous to 1729...

Solomon Baum (1813-98)...often told the father and uncle of the author that the vine had not changed during his lifetime; that in his old age it looked the same as when he was a boy; that his father Maurice Baum II (1772-1839) and his grandfather Abraham Baum (1742-1833) had told him that the trunks were big and old from their earliest recollection and during their lives had not changed...

An odd echo of the voice of Abraham Baum is lately quoted by Mr. John C. Bragaw in the October 1947 issue of The State, a North Carolina magazine. Mr. Bragaw draws from The North Carolina Reader (1858) the following reference to Mother Vineyard, by 'a roving reporter': 'The first vine of this name (Scuppernong) was found near...the banks of Scuppernong River...by some of the party composing the first Anglo-Saxon settlement on Roanoke Island...One small vine...was transplanted very soon on Roanoke Island, where, only a few years...[ago 17] was told by old Abraham Baum, then 84 years old, that when he was a boy the vine was the largest on the Island.'

The boyhood of Abraham Baum, born 1742, was in the late 1740's and early 1750's. If Mother Vineyard so long ago could have been described in such terms as 'big and old' and 'largest on the Island,' it obviously was too far advanced in age to have been set by the earliest of the Baums. Peter Baum could scarcely have obtained his grant before 1715; indeed a later date is likely. So at most there was a period of only some 35 years for the trunks to have reached the stage described by Abraham. Scuppernong vines do not grow so fast nor so early develop their peculiar appearance of twisted old age. Moreover, if the vine had been planted by the Baums, the old generations of the family would have known it, for the vine was a conspicuous feature of their ancestral homestead. They didn't know it. Almost certainly the Baums did not plant Mother Vineyard...

As lately as sixty years ago the Island grapes were not known as Scuppernong; they were simply called white grapes!...

Why was this vine called Mother Vineyard? The author doesn't know that either; perhaps the name just grew, as names of old things do grow, such as Father of Waters for the Mississippi River."

W. C. Etheridge, The Mystery of Mother Vineyard (Columbia, Mo.: Mimeographed by the author, n. d.), 3, 14-17, 19, and 21.

85. See Chapter 4, note 53.

86. Public Laws and Resolutions Passed by the General Assembly at Its Session of 1935 (Charlotte: The Observer Printing House, Inc., 1935), 287, Chap. 263.

87. Public Laws and Resolutions Passed by the General Assembly at Its Extra Session of 1936...and at Its Regular Session of 1937 (Raleigh: Mitchell Printing Co., 1937), 717, Chap. 389; and Public Laws and Resolutions Passed by the General Assembly at Its Extra Session of 1938...and at Its Regular Session of 1939 (Chapel Hill: The Orange Printshop, 1939), 581, Chap. 296.
88. They are a never-failing source of material for popular magazines. See, for example, the large two-page color photograph in Saturday Evening Post, vol. 228, no. 28 (January 7, 1956), 34-35.
89. Annual pony pennings are also held on Shackleford Banks and on Chincoteague Island, Va. However, to perpetuate the traditional Chincoteague roundup, the ponies must be brought from nearby Assateague Island, where they are grazed. Whitelaw, op. cit., vol. 2, 1382.
90. W. L. McAtee, Wildfowl Food Plants: Their Value, Propagation and Management (Ames, Iowa: Collegiate Press, Inc., 1939), 10, 89.
91. C. T. Williams, Jr., in interview by David Stick, April 19, 1956.
92. D. K. Tressler, Marine Products of Commerce (New York: Reinhold Publishing Co., 1940), 143-144.
93. C. T. Williams, Jr., in interview by David Stick.
94. Ibid.
95. McAtee gives other common names for eelgrass: brant grass, crab grass, duck weed, ribbon grass, salt-water grass, sea grass, sea hay, sea moss, sea oar, sea sedge, sweet grass, tiresome weed, turtle grass, and widgeon grass. However, the name duckweed is best applied only to Lemna; true widgeon grass is Ruppia maritima; and true turtle grass is Thalassia testudinum. The name eelgrass is sometimes applied to wild celery, Vallisneria spiralis. See McAtee, op. cit., 25, 113-115, and 118.
96. See Chapter 4, note 64.
97. N. C. Department of Conservation and Development, Seventh Biennial Report, 1938, 28; A. F. Chestnut, "The Oysters and Other Mollusks in North Carolina," 170, 172-174, in H. F. Taylor, op. cit. Chestnut points out that the scallop does not depend upon eelgrass; any surface of attachment will do. However, when the eelgrass, formerly very common, was removed, there were not sufficient plants to replace it immediately and to maintain the scallop population. Scallops are Pecten spp.

98. McAtee, op. cit., 11; C. Cottam, "Winter Notes from Coastal North Carolina," Auk, vol. 52, no. 3 (July, 1935), 318. Brant is Branta bernicla. Scientific names of wildfowl will be taken from W. L. Hamnett and D. C. Thornton, Tar Heel Wildlife, 2nd ed. (Raleigh: Wildlife Resources Commission, 1953), 97. Hereafter cited as Tar Heel Wildlife.
99. Tar Heel Wildlife, 44: "In many areas the activities of shrimp trawlers and haul-nets made it difficult for the grass to become re-established, but on areas where water is too shallow for these boats to operate, eelgrass has made a fairly good recovery. Probably the best growth can now be found on the reefs west of Pea, Portsmouth, and Hatteras Islands, and on the Swan Quarter Refuge in Hyde County."
100. T. G. Pearson, C. S. Brimley, and H. H. Brimley, Birds of North Carolina (Raleigh: Edwards and Broughton, 1919), 8. Hereafter cited as Birds.
101. T. G. Pearson, Adventures in Bird Protection (New York: D. Appleton-Century Co., 1937), 50.
102. Birds, 17, 36-38, and 99.
103. Birds, 8. Feather hunting was largely stopped by 1905. Pearson, Adventures, 116.
104. T. S. Critcher, "An Investigation of the Waterfowl Resources on Currituck Sound, North Carolina during the 1947-1948 and 1948-1949 Hunting Seasons," Unpublished Master's thesis, N. C. State College, 1949, 36; Pearson, Adventures, 118.
105. Critcher, op. cit., 31.
106. Pearson, Adventures, 117-118. Ruddy ducks, Oxyura jamaicensis, are also known as "boobies." Birds, 84-85.
107. Critcher, op. cit., 35.
108. Canvasbacks are Aythya valisineria; redheads, Aythya americana; buffleheads, Bucephala albeola; blue-winged teal, Anas discors; green-winged teal, Anas carolinense; Canada goose, Branta canadensis; and whistling swan, Cygnus columbianus. Coots, Fulica americana; baldpate ("widgeon"), Mareca americana; scaup duck ("broadbill" or "big blackhead"), Aythya marila; and lesser scaup duck ("little scaup," "blackhead," or "bluebill"), Aythya affinis, are also taken in large numbers.
Prices changed greatly. H. H. Brimley noted the following prices in 1884: "The following are the approximate prices the gunners were getting for their

fowl, cash on the spot by the regular buyers, all prices per pair except as otherwise noted; Canvasback, \$1.00; Redhead, 50¢; "common duck," 30 cents; small ducks, as Teal, Ruddy, Bufflehead, etc., 25 cents, with four ducks constituting a pair! Canada Geese brought 50 cents each." H. H. Brimley, A North Carolina Naturalist, H. H. Brimley: Selections from His Writings, ed. by E. P. Odum (Chapel Hill: University of North Carolina Press, 1949), 19.

H. B. Ansell, op. cit., vol. 1, 48, gave the following prices but no date: "one dollar per pair was the maximum price for the canvas-back, about from fifty to seventy-five cents for the red-head; and from twenty-five to fifty cents for a good pair of the common ones."

Critcher, op. cit., 36, gives a good summary. "The price received by the local gunners for their kill varied, depending on the species, abundance, and time of year. Redheads and canvas-backs at times brought as much as \$2.50 to \$4.00 a pair late in the season. Earlier they sold for \$1.50 to \$2.00 a pair. Ruddy ducks usually brought from \$0.50 to \$1.25 a pair. Sometimes four individuals of this species were counted as a pair. At times, however, ruddy ducks brought as little as \$0.05 each, or as much as \$2.85 a pair. Marsh ducks, or common ducks, varied from \$0.35 to \$1.00 a pair. Canada geese were not in great demand and usually sold from \$0.25 to \$0.40 each. A swan sold for about \$0.50."

109. Critcher, op. cit., 34.
110. Tar Heel Wildlife, 40.
111. For pictures of punt guns see Pearson, Adventures, between pp. 118 and 119, and Brewington, Chesapeake Bay, 228. The gunner himself did not, of course, support this gun while shooting; it was mounted on a swivel.
112. Critcher, op. cit., 34; Brewington, op. cit., 228.
113. Critcher, op. cit., 34. Brewington, op. cit., 223, records the use of decoys on the Chesapeake as early as 1814.
114. Brimley, op. cit., 19.
115. Critcher, op. cit., 35.
116. Pearson, Adventures, 117.
117. Pratt, op. cit., 106.
118. Duck is not an old name. It may have come into being when the post office was established there in 1909. It owes its name to the prevalence of ducks in the area.
In the 1900 (12th) Census, N. C. vol. 20, Currituck County, Atlantic Township (Kitty Hawk-Duck area), there were six hunters, slightly less than six per cent of the

total number of jobholders, and in the 1910 (13th) Census, N. C. vol. 23, Currituck County, Atlantic Township, there were only three hunters, 2 1/2 per cent of the total employed in that township. However, in winter many more than that turned out for hunting, partly for home consumption and partly for sale.

119. The name "Body" Island first appears on the Nairne and Lawson maps. It does not occur on Moseley's or Wimble's maps, but it reappears on Collet's 1770 map as "Bodies." Collet's 1770 map shows "Bodies" as the island between Roanoke and Gunt (modern Oregon) inlets, and the name Bodie Island today is properly reserved for that section of the Banks, although it is no longer an island.
The Bodie Island Gun Club (Fig. 13) was formed in 1904, and the work of the club superintendent in planting and dune building was very instructive to the WPA program in the 1930's. See A. C. Stratton and J. R. Hollowell, "Methods of Sand Fixation and Beach Erosion Control," Unpublished typescript, National Park Service, 1940, 9-10. Although this report was not published, an article was published using the material in it: G. S. Wells, "The Forest That Blew Away," American Forests, vol. 60, no. 3 (March, 1954), 14-16, 51-52.
120. The name Pea Island refers to that section of Hatteras Island which lies between Oregon Inlet and the site of former New Inlet. The name is apparently quite new and probably originated after 1846.
The Pea Island Gun Club hired the Bodie Club superintendent to rehabilitate their premises also. Stratton and Hollowell, op. cit., 10.
121. For other mentions of clubs, see N. H. Bishop, op. cit., 161; and H. A. Weeks, "Roanoke Island - A College Rendezvous," The University Magazine, vol. 7, nos. 1-2 (August, 1892), 33-38.
122. Critcher, op. cit., 28. However, "float" blinds can be used if the sides extend thirty inches above the water. Ibid., 37.
123. Critcher gives a thorough description of blinds. The three types are bush, point, and float, and at present they occur in approximately the following ratio: 6-2-1.
/Stick or bush blinds/ "These blinds are usually situated in open water, and are elevated on poles from three to six feet above average water level. The body of the blind is a box almost three feet wide, six feet long, and three and one-half feet deep. Inside this box is a low movable bench; its location in the box is determined by the direction of approach of the ducks or geese. Usually two gunners shoot from this type blind. The box is commonly camouflaged with green pine boughs . . .

The next most common type of blind is the point or shore blind. This type is usually on land, and situated to overlook an expanse of water frequented by waterfowl. The locality may be an island, a point of land, or almost any advantageous spot along the shore. Natural plant material is used for camouflage. This type may have a built in box or merely equipped with a seat for one or two men.

The third type is the float blind . . . A small boat is usually used. A floating frame is placed around the boat, and pine boughs are stuck into holes in this frame for camouflage." Critcher, op. cit., 84-85.

The bush blinds are the most numerous, and since they are not moved and not razed each year, and since they are placed in conspicuous places, a visitor might think that they are even more predominant than they actually are. Bush blinds are a common sight along the sound shores.

124. See Critcher's map of blind locations on p. 97 of his thesis
125. See Critcher's map of feeding and resting areas on p. 81 of his thesis.
126. See note 98 above.
127. Critcher, op. cit., 7-8, 18-22; Tar Heel Wildlife, 44; W. L. McAtee, "Upper Currituck Sound, 1910 and After," The Chat, vol. 17, no. 3 (September, 1953), 58.
128. RCE, part 1, 1932, 500; Critcher, op. cit., 19.
129. Tar Heel Wildlife, 44. The war-time Navy bombing activities at Corolla are said to have eased the passage of salt water across the Banks there. Loc. cit.
Critcher, op. cit., 18, says: "It is definitely known that severe storms have caused the ocean to overflow the outer banks and enter the Sound . . . When such an overflow occurs the aquatic plants in the immediate area are often killed due to an increased salinity beyond their tolerance. The next season, however, normal and sometimes improved growth is resumed."
130. The voracious carp, Cyprinus carpio, are said to destroy considerable quantities of aquatic vegetation. Tar Heel Wildlife, 44. They also generally get the blame for any supposed decline among their fellow fishes.
"Carp were introduced into the United States in 1876, thus completing the round-the-world spread of this species through the agency of man. It is native of China, was brought to the European continent in the thirteenth century, to England in the sixteenth, and finally to America" (L. A. Walford, ed., Fishery Resources of the United States of America, Department of the Interior, Fish and Wildlife Service, 1945, 116). Carp were introduced into North Carolina waters in 1879 and soon became very abundant. Smith, Fishes, 107.

131. Tar Heel Wildlife, 44.
132. Ibid., 41.
133. T. S. Critcher, "North Carolina Waterfowl Kill," Wildlife in North Carolina, vol. 14, no. 7 (July, 1950), 14-17.
134. H. M. Smith, "Report on the Fisheries of the South Atlantic States," U. S. Fish Commission, Bulletin, vol. 11 (1891), 285. This can be seen in any one of the statistical summaries of North Carolina fisheries and by comparison with other states.
135. C. H. Townsend, "Statistics of the Fisheries of the South Atlantic States," U. S. Commission of Fish and Fisheries, Part 25, Report of the Commissioner for the Year Ending June 30, 1899, Appendix, pp. 179, 183.
136. The latest published statistics are for 1952. They show that menhaden alone represent eighty per cent of the catch in North Carolina by weight and twenty-three per cent by value. Most of the menhaden are caught by Carteret fishermen, and Carteret County would lead on the strength of menhaden alone. A. W. Anderson and E. A. Power, "Fishery Statistics of the United States, 1952," U. S. Department of the Interior, Fish and Wildlife Service, Statistical Digest, 34, 1955, 167-168.
137. See Chapter 4, note 74.
138. Leary, op. cit., 188.
139. The pound net consists of an inner "pound" ("bowl" or "head") about ten yards square, made of net staked to the bottom and extending to the surface. Into the pound empty one or two "bays" (or "hearts"), and into the bay comes a "leader" which is from 50 to 350 yards long. The fish follow along the leader and enter the bays and finally the pound, where escape is impossible. Viewed from above a typical pound net might look like this:



Fig. 35

DIAGRAM OF A POUND NET

Sometimes only one bay, or heart, was used. Designs and dimensions changed from time to time and from region to region. A "shad pound" differed from the regular pound net only in that a wider mesh was used.

For descriptions of pound nets, see G. K. Reid, Jr., "The Pound Net Fishery in Virginia, Part 1 - History, Gear Description, and Catch," Commercial Fisheries Review, vol. 17, no. 5 (May, 1955), 1-15; J. N. Cobb, "Investigations Relative to the Shad Fisheries of North Carolina," N. C. Geological Survey, Economic Paper, 12, 1906, 19; E. Higgins and J. C. Pearson, "Examination of the Summer Fisheries of Pamlico and Core Sounds . . .," Bureau of Fisheries, Document, 1019, 1927, 33-35; and L. Radcliffe, "Fishery Methods and Gear," 248-251, in Tressler, op. cit.

The pound net was introduced into Albemarle Sound, probably in 1870, by John P. Hettrick of Pennsylvania. Leary, op. cit., 189, says 1869, but all others say 1870. Goode et al, Fisheries, Section 2, 481, says that it was introduced by W. P. Hetterick (sic) of Huron, Ohio. Goode et al, Fisheries, Section 5, vol. 1, 609, says, "pound nets were introduced here in 1870 by a German, Mr. Hettrick, who still controls some of the more important stations." Because of Hettrick's German ancestry the pound net became known in North Carolina as the "Dutch" (from "Deutsch") net. This name is probably not used anywhere but in the Carolina Sounds. It is unknown in Virginia (Letter to the writer from G. K. Reid, Jr., Texas A&M College, Dec. 2, 1955). Another synonym for the pound net is pot net. See Goode et al, Fisheries, Section 5, vol. 1, 636.

Reid, op. cit., 3-4, has the following to say about the pound net and its introduction into Virginia: "Pound nets apparently were first used in the fisheries of New England at Westbrook, Conn., in 1849, and from that area their use spread rapidly to other regions. They were introduced at Sandy Hook, N. J., by George Snediker of Gravesend, L. I., about 1855. It was from Snediker that the fishermen of New Jersey and the Chesapeake and Delaware Bays obtained their first idea of pound nets . . .

Captain Henry Fitzgerald made an effort as early as 1858 to introduce the pound net into the waters of Chesapeake Bay, but his net was not properly constructed and was so unsuccessful that it was soon taken up. No other attempt was made to use pound nets until about 1870, when Snediker and Charles Doughty of Fairhaven, N. J., came to the area and located on the banks of the James River, a few miles above its mouth."

140. J. N. Cobb, op. cit., 10.
141. C. H. Stevenson, "The Shad Fisheries of the Atlantic Coast of the United States," U. S. Commission of Fish and Fisheries, Report of the Commissioner for the Year Ending June 30, 1898, 161.
142. Earll, 489, in Section 2 of Goode et al, Fisheries.

143. Pratt, op. cit., 197.
144. Interview with Harry Davis, Director of the N. C. State Museum and son of the late Dr. J. J. Davis.
145. Outlaw, op. cit., [57]. In the 1910 census it was reported that nine fishermen in the village of Nags Head were born in Sweden. They may not have been associated with the early pound net experiment because they do not show up in the 1900 census, but almost surely they came to Nags Head on the advice of the earlier New Jersey Swedish fishermen. In 1920 there were only two fishermen in the village born in Sweden, and in 1930 there was only one Swedish fisherman.
146. Interview with W. F. Baum of Manteo.
147. Stevenson, op. cit., 161; J. N. Cobb, op. cit., 18; Higgins and Pearson, op. cit., 35.
148. Stevenson, op. cit., 162.
149. J. N. Cobb, op. cit., 19-20; Biennial Report of the State Geologist, 1909-1910, 118. J. N. Cobb has appended two maps, Charts 7 and 8, which show the location of seines and pound nets fished for shad in 1906 in the Carolina Sounds. R. E. Coker, "Experiments in Oyster Culture in Pamlico Sound, North Carolina," N. C. Geological and Economic Survey, Bulletin, 15, 1907, Plate 2 (between pp. 2 and 3), shows distribution of pound nets in Pamlico Sound in 1907.
150. Biennial Report of the State Geologist, 1909-1910, 118.
151. As a result of several interviews in 1955 it was determined that pound nets are now used only at Hatteras village and near the mainland Dare County towns of Manns Harbor and Stumpy Point.
152. Higgins and Pearson, op. cit., 35-37. Interview with A. Clark Stratton, Regional Director of the National Park Service and former NPS director of WPA activities on the Outer Banks in the 1930's.
153. Interview with E. W. Etheridge, Manteo, Aug. 9, 1955, and with R. H. Gray, Wanchese, Aug. 13, 1955.
154. Goode et al, Fisheries, Section 5, vol. 1, 555-556, 560.
155. R. E. Earll, "The Mullet Fishery," 563-564, in Section 5, vol. 1 of Goode et al, Fisheries, gives the only full description of these huts. He cites their occurrence in the Beaufort area and also at Cape Fear. It is not

known exactly how far north temporary huts of this form were built.

Collier Cobb, "Some Human Habitations," National Geographic Magazine, vol. 19, no. 7 (July, 1908), 509-515, has photographs of two such huts on Shackelford Banks and says: "I have visited hemispherical huts of woven rushes on Cedar Island, Core Bank, Shackelford Bank, near Tar Landing, less than a mile from Fort Macon, at the Rice Path, about the middle of Bogue Banks, and at the Carrott Island fishery, about four miles from Beaufort." Concerning their origin, Cobb says, p. 509, "These are by no means the homes of half-savage men, but are the temporary abodes of modern civilized men, native to our own shores, when they engage in the half-savage occupations of fishing and hunting. They are thus not survivals, but atavisms. Modern man finds himself in a situation practically identical with that of his savage ancestors, and he meets the conditions of existence in essentially the same way as the savage."

Earll said that these huts "differ considerably, according to the locality. In the vicinity of Beaufort, N. C., they are usually built of rushes and poles, and are, indeed, strange-looking pieces of architecture. When a building site has been selected, some of the men start for the woods in search of poles, which are to answer as a framework, while others go to the marsh to gather rushes, which are to serve as a covering. The ridge-pole is first placed in position, its front end resting in the crotch of a forked stick, while the other is supported by two poles that cross each other at the proper height, their bases being imbedded in the ground, to locate the corners of the building. Smaller poles are now placed in rows at an equal distance on either side of the ridge-pole. These answer the purpose of studding, each being notched at the point where the eaves should come, that they may be easily bent inward to the ridge-pole to support the roof. In some cases spikes are used to fasten the ends of the poles, but, owing to their cost or to the difficulty of obtaining, they are frequently dispensed with, strings of bear-grass being substituted in their stead. 'Laths,' consisting of small poles or sticks, are now tied to the studding in horizontal rows about 18 to 24 inches apart, and the framework is complete. Other long sticks, called 'liggers,' are now placed on the outside of the rushes, directly opposite the laths, the two being sewed or fastened together by means of threads of bear-grass, in order that the rushes may be held in position. When the bottom tier has been fastened another row of rushes is placed higher up, overlapping the first like shingles on a roof. These in turn are fastened to the laths in the same manner, care being taken that the lines formed by their lower ends may be even. The same process is continued until the ridge-pole is reached and

the entire structure has been inclosed. The layers of rushes are sufficiently thick to shed water and to break the force of the wind, though for better protection against cold the fishermen frequently 'bank' their houses with sand. The only openings in the house are a small hole at the rear gable, to allow the smoke from the camp-fire to escape, and a square aperture 2 or 3 feet in height at the front, which serves as a door. Two tiers of berths are put up on either side of the shanty, and each fisherman gathers grass or leaves, out of which he makes his bed. During pleasant weather the cooking and eating is usually done outside, each man keeping his supply of food separate, though four or five usually mess together, taking turns in preparing the food, which consists largely of corn meal and fish." Earll, 563-564, in Section 5, vol. 1 of Goode et al, Fisheries. Nothing really is known about the origin of these huts, but since, as Earll says, they "differ considerably, according to the locality," their construction was more than a matter of instinct, as Cobb would say. The hut which Earll described so thoroughly was in the Beaufort area.

It is not known how far north along the Banks these huts were built, but probably they stopped short of Portsmouth, and the closer spacing of settlements to the north made hut-building unnecessary.

Cobb, "Where the Wind Does the Work," 316, says, concerning the Banks but with no more definite location, "Their lodges used in fishing and hunting are built after the most primitive type of straw thatch, while a higher type, similar to that used in the village of Gabii in the days of Romulus and Remus, is used as a temporary residence during their camp meetings in the summer, and this higher type of dwelling is on Hatteras built of palmetto thatch." However, one can be sure that those who went to the camp meetings which were popular on Hatteras and Ocracoke during the last part of the nineteenth century had better quarters than palmetto-thatch huts. On the Outer Banks palmetto occurs abundantly only in the Buxton Woods at Cape Hatteras. This is the dwarf palmetto and occurs principally in the understory.

156. Earll, 565, 567-568, in Section 5, vol. 1 of Goode et al, Fisheries.
157. Smith, Fishes, 408-409.
158. Rachel Carson, Under the Sea-Wind (New York: Oxford University Press, 1952), Chapter 5, "Winds Blowing Seaward," 90-102, contains a fine description of mullet seining in the Beaufort area.
159. See Chapter 3, note 32.
160. See Chapter 4, note 114.

161. Goode et al, Fisheries, Section 2, 490; Section 5, vol. 2, 308-309.
162. Smith, "Report on the Fisheries of the South Atlantic States," 273.
163. F. W. True, "The Porpoise Fishery of Hatteras, N. C.," U. S. Fish Commission, Bulletin, vol. 5 (1885), 3-6. Rolinson, op. cit., 28, 60-69, gives figures on porpoises he caught from 1885 to 1891.
164. Tressler, op. cit., 644-645.
165. Leary, op. cit., 193. Sturgeon is Acipenser oxyrinchus.
166. Townsend, op. cit., 191.
167. Smith, Fishes, 57.
168. Menhaden, Brevoortia tyrannus, has had many local names along the east coast. The following is from G. B. Goode, "The Natural and Economical History of the American Menhaden," 7: "In Maine and Massachusetts the name 'pogy' is almost universally in use, though in the vicinity of Cape Ann it is partially replaced by 'hard-head' and 'hard-head shad.' The name 'menhaden' is exclusively applied in Southern Massachusetts, the Vineyard Sound, Buzzard's Bay, and Narragansett Bay, where it appears to have originated. From the eastern boundary of Connecticut to the mouth of the Connecticut River the name 'bony-fish' predominates, while in the western part of the State the species is usually known as the 'white fish.' In the waters of New York the usage of two centuries is in favor of 'mossbanker,' a name which also holds throughout New Jersey. In Delaware Bay, the Potomac, and Chesapeake Bay other variations are found in 'alewife' and 'greentail.' Virginia gives us 'bug-fish' in its various forms, while in North Carolina we first meet the name of 'fat-back', which is more or less prevalent as far south as the St. John's River, Florida. In all the Southern States, especially in the vicinity of Beaufort, N. C., the names 'yellow-tail' and 'yellow-tailed shad' are commonly heard. I am informed that in the Indian River, Florida, the fish is occasionally called the 'shiner' and the 'herring.'" Also see Goode's table on pp. 7-9; Smith, Fishes, 23; and W. E. Hathaway, "Effects of Menhaden Fishing upon the Supply of Menhaden and of the Fishes That Prey upon Them," Bureau of Fisheries, Bulletin, vol. 28, part 1 (1908), 273.
169. E. T. Deblois, "The Origin of the Menhaden Industry," U. S. Fish Commission, Bulletin, vol. 1, no. 2 (April 13, 1881), 46-47, says: "In 1811, two men, one by the name of Christopher Barker, and the other John Tallman, commenced the business of making oil out of menhaden fish . . . near

Portsmouth, R. I. . . . The first purse seine that was made, so far as I know, was made by John Tallman the first, and Jonathan Brownell and Christopher Barker, in the year 1826."

Goode, "Natural and Economical History," 118, states that the purse seine was invented by a Maine fisherman in 1837 and was first used for menhaden at Seaconnet, R. I."

Goode and Clark, "The Menhaden Industry," 368, in Section 5, vol. 1 of Goode et al, Fisheries, say that the purse seine may have been introduced into the menhaden industry by Benjamin Tollman (sic) of Portsmouth, R. I., about 1845.

For a good illustration of menhaden fishermen making a set upon a school of menhaden with a purse seine, see Walford, op. cit., 72. See also Radcliffe, "Fishery Methods and Gear," 243-245.

Goode and Clark, op. cit., 335, state the tremendous importance of the purse seine in catching menhaden. "The purse-seine is the most effective apparatus ever devised for the capture of either mackerel or menhaden. It has almost entirely superseded all other forms of apparatus in these fisheries. By its use, even in the open sea, immense schools of fish are easily secured in a small fraction of the time required when the hook-and-line and gill net were chiefly employed. The purse-seine is, however, not adapted for fishing in very shallow water, unless on smooth bottom, so that gill-nets and haul-seines are still used in rivers and in handling fish ashore."

170. Earll, 495, in Section 2 of Goode et al, Fisheries; W. A. Ellison, Jr., "The Menhaden," 89, in Taylor et al, op.cit.
171. Earll, loc. cit.; Ellison, loc. cit.
172. Goode, "Natural and Economical History," 117.
173. Earll, op. cit., 495; Ellison, op. cit., 89-90.
174. Earll, ibid., 496; Ellison, ibid., 90.
175. Earll, loc. cit.; Ellison, loc. cit.
176. Goode and Clark, op. cit., 332.
177. S. G. Worth, "The Striped Bass or Rockfish Industry of Roanoke Island, North Carolina, and Vicinity," Bulletin of the U. S. Fish Commission for 1887, 1889, 193-197. Striped bass is Roccus saxatilis.
178. Earll, 482, in Section 2 of Goode et al, Fisheries.
179. Anderson and Power, "Fishery Statistics of the United States, 1952," 172-173.

180. H. M. Smith, "The Fyke Nets and Fyke-Net Fisheries of the United States, with Notes on the Fyke Nets of Other Countries," U. S. Fish Commission, Bulletin, vol. 12 (1892), 300, defines fyke net thusly: "The designation fyke net should be reserved for that form of fish trap characterized by a bag-shaped inclosure, made of netting, distended at its mouth by a hoop, the opening into which consists of a funnel-shaped aperture . . . all other features are secondary and do not determine whether a given apparatus is or is not a fyke net, although a style so simple as that defined is rare." Smith has many plates showing different types of fyke nets. A "pound fyke" would be a pound with a fyke net set in it. Concerning the name, Smith, 300, says: "The name appears to have arisen from the Dutch word fuik, and was doubtless introduced by colonists from the Netherlands." See also Radcliffe, "Fishery Methods and Gear," 255.
181. H. L. Canfield, "The Capture and Marketing of Carp," Bureau of Fisheries, Economic Circular, 40, 1918, 3: "The fyke net or 'hoop net' - This device is perhaps the most generally used for carp, its chief advantages being low first cost and the ease with which the net is handled . . . The use of the fyke net for carp is general throughout the United States; the nets are generally set independently with flaring 'wings' or 'leads,' but in certain cases they are rigged in combination with straight netting leads to form a modified pound net."
182. Taylor et al, op. cit., 134.
183. Interview with Solomon Whitson, Duck, August 10, 1955.
184. Smith, Fishes, 245-247. This is Micropterus salmoides. Concerning popular names, Smith, 246, says: "The name by which this fish is generally known in North Carolina is 'Welshman,' which is not employed elsewhere. This designation was in use as early as 1709, when Lawson referred to the 'brown perch, or Welshman.' Another local name, peculiar to North Carolina and Virginia, is 'chub.' 'Trout' is the name usually applied to the fish in all the southern states." See also Pratt, op. cit., 102.
185. Smith, op. cit., 108-110. The eel is Anguilla chrisypa. Smith, 110, says: "The fishermen use wire eel pots and also pots made from kegs, which they say are more successful. The market is wholly in the north, owing to the widespread and deep seated local prejudices against eels . . . Eels have a very delicate, well-flavored flesh which is white when cooked, and rank high as food fishes, although many people refuse to eat them on account of their supposed snakish affinities."
 For a description of eel pots, see Radcliffe, "Fishery Methods and Gear," 255-258. "They range from 1 1/2 to 3 feet in length and 6 to 10 inches in diameter. They are

cylindrical, tapering or rectangular, with a frame covered with fine meshed wire or netting or splints, with one or two funnel openings, the mouth being about two inches in diameter."

Smith, 110, gives a highly interesting account of two religious groups who made eel-catching a specialty: "About 1897 a religious band, called the 'Arkites,' went to Beaufort from Virginia in a houseboat or ark, taking with them eel pots; they began to fish for eels, marketing their catch in Newbern, but the business never met with much success . . . In Lake Mattamuskeet eels are abundant, but only sparingly utilized; at one time a religious sect, known as the 'Sanctified,' made a business of catching eels in the lake and shipping them north." It is true that certain nationalities, such as Italians, seem to enjoy eels, but what could be the connection between eels and those religious sects? Possibly it is only that they saw that eels were a locally ignored resource and that they could fish for them without competition and profitably ship them north.

186. Interview with Mr. Whitson.
187. W. W. Anderson, M. J. Lindner, and J. E. King, "The Shrimp Fishery of the Southern United States," Commercial Fisheries Review, vol. 11, no. 2 (February, 1949), 10. Also see F. F. Johnson and M. J. Lindner, "Shrimp Industry of the South Atlantic and Gulf States," Bureau of Fisheries, Investigational Report, 21, 1934, 6.
188. Earll, 484, in Section 2 of Goode et al, Fisheries.
189. C. Broad, "The Shrimps in North Carolina," 191, in Taylor et al, op. cit. In 1945 North Carolina accounted for 5.5 per cent of the total catch of shrimp in the United States. Loc. cit.
190. Concerning shrimp production, H. F. Taylor has said: "From 8 million pounds, whole weight, in 1890, annual production rose to 19 million pounds in 1908. In 1938-40, production was 7.8 times what it had been in 1908" (Taylor et al, op. cit., 417).
191. For good sketches of a shrimp trawl, otter doors, and stern rig for towing the trawl, see "U. S. Shrimp Supply and Disposition, 1953," Commercial Fisheries Review, vol. 16, no. 11 (November, 1954), 44-45.
 "Shrimp trawls vary in width, the average in North Carolina being about 50 feet. They are made of 2-inch stretched mesh webbing and consist of a bag for collecting the catch and wings for guiding the shrimp into the bag. Trawls are held open by otter boards or 'doors' which function in water much as a kite does in air. The boards, secured to the trawler by lines, hold the net open and against the bottom when the net is pulled through the water" (Broad, op. cit., 192).

192. Taylor et al, op. cit., 417.
193. "A channel net is a shrimp trawl anchored at the surface of the water. Otter boards are not used, but the net is held open by three or four poles secured to the lead and cork lines. Extra floats keep channel nets at the surface. One end is usually secured to an anchored boat; the other end is held in position by a separate anchor. The net is fished by emptying the cod end or bag into a skiff" (Broad, op. cit., 192). Back Sound lies between Harkers Island and Shackleford Banks.
194. This is the blue crab, Callinectes sapidus, which occurs in sounds, bays, and estuaries from New York to Texas. J. C. Pearson, "The Blue Crab in North Carolina," 205-207, in Taylor et al, op. cit.
195. R. Rathbun, "The Crab, Lobster, Crayfish, Rock Lobster, Shrimp, and Prawn Fisheries," 642, in Section 5, vol. 2 of Goode et al, Fisheries.
196. Loc. cit.
197. A trot line is simply a baited line which rests on the bottom and which is raised periodically to remove the crabs.
 For a good description of catching crabs by trot line near Charleston, S. C., in 1782, see S. Kelly, Samuel Kelly, An Eighteenth Century Seaman, ed. by Crosbie Garstin (New York: Frederick A. Stokes Co., 1925), 54-55.
 Goode et al, Fisheries, Section 5, vol. 3, plate 246 is labeled "Negroes trawling for crabs on the Virginia and North Carolina coasts." It shows two negroes in a small scow taking crabs from a trot line.
198. Pearson, "The Blue Crab," 211.
199. "The crab pot . . . is a box 2 feet square, more or less, constructed of wire mesh on a rigid metal frame, divided into a lower or bait chamber which contains a cylindrical bait cup in its center, and an upper or trap chamber. The crab, attracted by the bait, enters through an aperture in the side, and in swimming upward after grasping at the bait, goes through an opening into the trap chamber and is imprisoned" (J. Wharton, "The Chesapeake Bay Crab Industry," Fish and Wildlife Service, Fishery Leaflet, 358 (Revised), 1954, 9. Wharton has excellent descriptions of all types of crab gear. So does D. G. Cargo, "Maryland Commercial Fishing Gears, III, The Crab Gears," State of Maryland, Board of Natural Resources, Department of Research and Education, Educational Series, 36, 1954.
200. Townsend, op. cit., 179.
201. Pearson, "The Blue Crab," 206.

202. Ibid., 212-213; N. C. Department of Conservation and Development, Seventh Biennial Report, 1938, 28; J. H. Pratt, "The Fisheries of North Carolina," N. C. Geological and Economic Survey, Biennial Report of the State Geologist, 1915-1916, 1917, 149.
203. R. E. Coker, "The Diamond-Back Terrapin in North Carolina," 219, in Taylor et al, op. cit.
 Loggerhead Inlet got its name from the turtle. Near the site of former Loggerhead Inlet. on the Pea Island topographic sheet (AMS 1/25,000, 1951) are shown the "Lagerhead Hills." This promises to give rise some day to a colorful origin legend.
 Goode et al, Fisheries, Section 5, vol. 3, plate 235, shows "Diving for loggerhead turtle, Morehead City."
204. The Atlantic Coast diamond-back terrapin is Malaclemmys centrata, with subspecies centrata ("Carolina") occurring from Cape Hatteras to Florida and concentrica ("Chesapeake") from Cape Hatteras to Buzzard's Bay. The Gulf species is Malaclemmys pileata. The distinction between the "Carolina" and "Chesapeake" types is so slight that Coker says that "strictly dependable classification of individual terrapin is often impossible." Coker, op. cit., 220, 223-224; S. F. Hildebrand, "Review of Experiments on Artificial Culture of Diamond-Back Terrapin," Bureau of Fisheries, Document, 1060, 1929, 27-28.
205. Coker, op. cit., 224.
206. Earll, 482, in Section 2 of Goode et al, Fisheries.
207. F. W. True, "The Turtle and Terrapin Fisheries," 499, in Section 5, vol. 2 of Goode et al, Fisheries.
208. Earll, 482, in Section 2 of Goode et al, Fisheries. Earll said that tracking terrapin with dogs was peculiar to this region, but Coker, op. cit., 222, reports this practice also from South Carolina.
209. True, op. cit., 500.
210. Hildebrand, op. cit., 25. Coker, op. cit., 224, says:
 "It was certainly not uncommon in the past for terrapin to be sold from Georgetown, S. C., to a dealer in Wilmington, then passed from Wilmington to a dealer in the Beaufort, N. C., region and thence to Crisfield, Md. Thus, terrapin from South Carolina might finally reach the city market as 'Chesapeakes.'"
211. Coker, op. cit., 229; Hildebrand, op. cit., 26-27. N. C. Department of Conservation and Development, Fifth Biennial Report, 1934, said, concerning diamond-back terrapin: "This industry lost its value on account of

prohibition . . . terrapin was served at beer parties . . . It has come into its own again since the repeal of prohibition." However, it has not come into its own again. It appears that northern gourmets have been successfully weaned of their taste for terrapin.

212. Chestnut, 160-161, in Taylor et al, op. cit. The hard clam, Venus mercenaria, has various names: quahaug or quohog, hard-shell clam, round clam, "little neck," and "cherrystone." The last two names also apply to grades.
213. Earll, 484, in Section 2 of Goode et al, Fisheries.
214. Chestnut, op. cit., 166. At present one can still see the remains of three circular brick cisterns, each of about five feet diameter, at the site.
215. Loc. cit. This was obviously more than an economy move to use old labels. North Carolina clams were deemed inferior to the northern product.
216. Ibid., 167. Chestnut says that the plant was moved to Witt, now Sea Level, N. C., and later to Marco, Fla. That may be, but apparently Ocracoke was not left without a clam factory because the 1910 census lists a Doxsee as a "laborer at canning factory."
217. Chestnut, op. cit., 167, "Table 5. Hard Clam Production, North Carolina, 1880 to 1948."
218. R. E. Tiller, J. B. Glude, and L. D. Stringer, "Hard-Clam Fishery of the Atlantic Coast," Commercial Fisheries Review, vol. 14, no. 10 (October, 1952), 20. This article also describes gear from the other clamming areas.
Clamming was encouraged during the depression because "all a person has to invest to make a living clamming is a 50% rake." N. C. Department of Conservation and Development, Seventh Biennial Report, 1938, 27.
219. Chestnut, op. cit., 167-168. Chestnut added that unreliability of clambers would be an additional factor, but this complaint does not seem justifiable.
220. Ibid., 143. The native eastern oyster, Ostrea virginica, is distributed from the Gulf of St. Lawrence to Mexico and is the only commercially important species on the Atlantic and Gulf coasts.
221. Ibid., 152-153, 159; F. Winslow, Report on the Waters of North Carolina, with Reference to Their Possibilities for Oyster Culture (Raleigh: P. M. Hale, 1886), 141.
Coastal peoples regard the adjacent waters as theirs by right of propinquity. George Ives said in 1911: "It is a fact that the people along the coast think that the

people up country have not a thing to do with it. They want to run the thing themselves . . . I have heard it said that if dredges went up Bogue Sound and over on New River and other points the people living in that section would shoot at them. So you see that these people think that the fish and oysters belong to them because they happen to live in that immediate vicinity" (Pratt, "Report," 27).

222. Pratt, "Report," 26.
223. Chestnut, op. cit., 143; C. Grave, "Investigations for the Promotion of the Oyster Industry of North Carolina," U. S. Commission of Fish and Fisheries, Report of the Commissioner for the Year Ending June 30, 1903, 1905, 276.
224. Grave, loc. cit. The only implements used by the native oystermen had been short-handled, wooden-headed tongs, and the Chesapeake men introduced long-handled, iron-headed tongs. The introduction of dredging was much more important. By dredging, production could be increased tremendously.
225. "Before they began operations beds located farther than 2 miles from shore were practically unknown, but now such off-shore grounds are the principal source of the Pamlico product" (Loc. cit.).
226. Loc. cit.; Chestnut, op. cit., 143; Pratt, "Report," 28; Pratt, "Fisheries," 148; P. S. Galtsoff and H. R. Seiwel, "Oyster Bottoms of North Carolina," Bureau of Fisheries, Economic Circular, 66, 1928, 1.
227. Chestnut, op. cit., 143-144. See Chestnut's table, p. 144, "Oyster Production - Maryland and North Carolina - 1880 to 1908."
228. Ibid., 145-146. See Chestnut's Table 2, p. 146, "Oyster Production of North Carolina, 1880 to 1948."
229. Ibid., 157-160.
230. Walford, op. cit., 74; J. C. Pearson, "Winter Trawler Fishery off the Virginia and North Carolina Coasts, Vol. 1," Bureau of Fisheries, Investigational Report, 10, 1932, 1-2; R. Buller, "A Fishery Survey of Southern Coastal Waters," Fish and Wildlife Service, Special Scientific Report: Fisheries, 58, 1951, 1.
The croaker is Micropogon undulatus. It is known from
231. Massachusetts to Texas, but the principal fishery is in Chesapeake Bay. E. W. Roelofs, "The Edible Finfishes of North Carolina," 129, in Taylor et al, op. cit.
231. Buller, loc. cit.; Pearson, "Winter Trawler Fishery," 1-2.

232. Buller, loc. cit.
233. Icing was introduced in 1874 by George N. Ives. Earll, 486, in Section 2 of Goode et al, Fisheries. Ives was the most prominent single innovator in North Carolina fisheries. See notes 69, 143, and 222 above. In the 1870's Ives began the shipping of scallops by rail to northern markets. J. S. Gutsell, "Scallop Industry of North Carolina," Bureau of Fisheries, Document, 1043, 1928, 174. In 1903-1904 Ives equipped a sharpie with a naphtha motor and sent it to the blackfish rocks off New River, the first to do so. Smith, Fishes, 279.
234. F. LaMonte, "A Preliminary Survey of Marine Angling in North Carolina," 257, in Taylor et al, op. cit., defines "charter boat" as "a boat used only for angling and equipped for outside, offshore, and Gulf Stream fishing. Such a boat should be at least 38 feet long, equipped with twin engines and with ship-to-shore radio." The rest, with the exception of small motor boats and skiffs, are "party boats."
235. N. Marshall, "Hydrography of North Carolina Marine Waters," 30, in Taylor et al, op. cit. Also LaMonte, op. cit., 255.
236. Federal Writers' Project, The Intracoastal Waterway: Norfolk to Key West (Washington: GPO, 1937), 6. This is also known as Whale Head Light. Also at Corolla are Whale Head Bay and Whale Head Hill. See Barco topographic sheet, AMS 1/50,000, 1947. Whale Head is also another name for the settlement of Corolla.
- Collier Cobb was perhaps the first to state that "whalehead" is a generic folk term on the Banks for the large dunes. See his "Notes on the Geology of Currituck Banks," Elisha Mitchell Scientific Society, Journal, vol. 22, no. 1 (March, 1906), 17. Perhaps this was true at one time, but this term is not recognized today by Bankers. The Bankers now call these dunes "hills"; the term "dune" is an introduced one. Possibly "whalehead" was at one time a generic term for these dunes. There is record of one Richard Etheridge of "Currituck Bays and Bay of Kitty Hawk" bequeathing his plantation "Whalehead" to his son Adam in 1740. J. B. Grimes, op. cit., 114.
- Cobb may have introduced the term "barchane" to the Banks. I. Murphey, The Outer Banks (Kill Devil Hills: Surfside Press, 1951), 31, tells of a dune called Barchane Hill which she says was named by a shipwrecked Turkish sailor! She does not give the location of this dune.
237. Letter from David Stick, April 9, 1956.
238. Most of the Life Savers, or surfmen, were recruited locally and lived with their families near the station. Having LSS stations in the vicinity increased the size of

some little settlements greatly, e.g., Corolla and Duck. The Bankers proved to be excellent surfmen and some were sent to serve at distant stations on the Atlantic coast, but most were allowed to remain at home. For many, joining the Life Saving Service did not mean moving their home.

239. A handy guide to the changes in organization of various government offices is Guide to the Records in the Records in the National Archives (Washington: GPO, 1948), These dates came from pp. 89 and 91.
240. Letter from David Stick, May 9, 1956. In 1954-1955, the Hatteras Inlet Station, on the southwest side of the inlet, was abandoned, but a new Hatteras Inlet Station was established at the old Gooseville Hunting Club, located between Hatteras village and the inlet. See map, Plate V.
241. In the 1940 census there were so many different job classifications that it was difficult to tell just how many got their pay from the government. Thirty-six per cent is probably a conservative figure.
242. All these percentages were derived from the census schedules, 1870-1950.
243. Stratton, op. cit., 13.
244. Ibid., "Map Showing Area Embraced by Cape Hatteras National Seashore - Proposed."
245. Ibid., 77. For the types of fences used or experimented with, see Figs. 7-10 between pp. 27 and 28 of Stratton's report.
246. Ibid., 78-79. The exact figures were 141,841,821 and 2,552,359, respectively.
247. American beach grass, Ammophila breviligulata, is native to sand dunes along the coast from Newfoundland to Wilmington, N. C. Sea oats, Uniola paniculata, is native to coastal dunes from Cape Henry to Texas. Cord grass, Spartina patens, is a salt marsh and meadow grass found from Quebec to Texas. Cord grass was found to be an excellent sand binder to start a dune, but it cannot be permanent because it is a marsh grass and not a dune grass. Bermuda grass, Cynodon dactylon, also called wiregrass, is now common throughout North Carolina and was introduced to this country probably from India. Ibid., 48-50, 57. See also A. S. Hitchcock, Manual of the Grasses of the United States (Washington: GPO, 1935), 180, 320; and H. L. Blomquist, The Grasses of North Carolina (Durham: Duke University Press, 1948), 5, 79, 107.
248. Compare with the area that was proposed in the 1930's.

249. B. P. Robinson, ed., The North Carolina Guide (Chapel Hill: University of North Carolina Press, 1955), 313.
250. Ibid., 308.
251. The 1870 and 1880 figures were compiled by the writer. The figures for the censuses 1890-1950 were taken from the Bureau of the Census published summaries. These summaries were used because they are readily available, and although there are some discrepancies between these figures and those which the writer compiled for the period 1890-1950, the differences were slight and unimportant.

The Bureau of the Census summaries used were the following:

Twelfth Census of the United States 1910.
Population by Counties and Minor Civil Divisions
1910, 1900, 1890 (Washington: GPO, 1912).
Fifteenth Census of the United States: 1930.
Vol. 1. Population: Number and Distribution of
Inhabitants (Washington: GPO, 1931).
Census of Population: 1950. Vol. 1.
Number of Inhabitants (Washington: GPO, 1952).

Only the population of the village of Portsmouth and not all of Portsmouth Township is considered in the table. In 1920 the population of Portsmouth was added to that of Cedar Island in the census. One familiar with the family names in each area could separate them, but the figure used in the table was arrived at by taking the midpoint between the 1910 and 1930 figures.

Ocracoke Township of Hyde County is the island of Ocracoke, but since the only inhabited portion of the island has always been the village, the figure for the township is the same as that for the village.

Hatteras Island is composed of two townships, Hatteras and Kennekeet. The division between the two is between the villages of Buxton and Avon. Hatteras Township includes the villages of Hatteras, Frisco, and Buxton. Kennekeet Township takes in Avon, Salvo, Waves, and Rodanthe.

Nags Head Township extends from Oregon Inlet northward to and including Nags Head. The whole of Roaboke Island is also in the Nags Head Township. Before 1948 Kill Devil Hills and Colington were in Nags Head Township, but they are now in Atlantic Township. This change must be considered while reading the table.

Atlantic Township extends as far north as Caffey's Inlet. Before 1919, Atlantic Township, Caffey's Inlet down to and including Kitty Hawk, was in Currituck County, but in that year it was annexed to Dare.

Unfortunately the population of Corolla could not be determined in the census schedules, because the Banks portion of Currituck County is in townships of which part is on the mainland. Again, a local person, familiar with the names, could separate them, but fortunately the population of this area has never been large.

252. The Portsmouth Post Office was established in 1840. All the dates for the establishment of post offices are from David Stick's notes from Post Office Records in the National Archives.
253. Ocracoke Post Office was established in 1840, 13 days before Portsmouth's.
254. Hatteras Post Office was established in 1858.
255. Private Laws Enacted by the General Assembly at Its Session of 1931 (Raleigh: State of North Carolina, 1931), 20-22, Chapter 23.
256. W. P. A., Writers' Program, How They Began - The Story of North Carolina County, Town, and Other Place Names (New York: Harian Publications, 1941), 35.
257. The Cape Post Office was established in 1873.
258. There was a Kinnakeet Post Office from 1873 to 1883. Note that the township is spelled "Kennekeet."
259. U. S. Coast Survey, "(Map) Coast of North Carolina and Virginia," 1862, and USC&GS Coast Chart 139, "From Oregon Inlet to Cape Hatteras, North Carolina," 1902. Little Kinnakeet is shown also on the 1852 USCS survey sheet T-377 (David Stick's photostats of original survey sheets). On none of these maps is Little Kinnakeet named.
260. This is contrary to the popular notion. Cobb, "Where the Wind Does the Work," tells of fishing villages which have been buried by the sand. One was subsequently uncovered, and the houses again became inhabited!
261. Salvo Post Office was established in 1901.
262. Rodanthe Post Office was established in 1874. When the new names--Frisco, Buxton, Avon, Salvo, Waves, and Rodanthe--were originated, they referred only to the post offices, and the settlements were called by their original names. At present, however, even though the old names are still recognized, the new names are used almost exclusively.
263. See note 30 above.
264. See, for example, USC&GS Chart 1229, "United States - East Coast. North Carolina, Currituck Beach to New Inlet," 1936. These fishhouses were still further victims of transportation improvement.
265. Letter to the writer from R. E. Daniels, Secretary-Treasurer of the Globe Fish Company, January 14, 1956.

266. Nags Head Post Office was established in 1884. Griffin Post Office at Nags Head later handled Nags Head mail temporarily. Nags Head has been spelled "Nag's Head," "Nagshead," and "Naghead."
267. Private Laws of the State of North Carolina, Session 1923 (Raleigh: Mitchell Printing Company, 1923), 492, Chap. 241.
268. B. Robinson, op. cit., 308.
269. Colington Post Office was established 1889. The Kitty Hawk topographic sheet, AMS 1/50,000, 1948, calls the settlement at the end of the road on Colington "Eagleton."
270. Kitty Hawk Post Office was established in 1878. Otila Post Office was established in 1905 but was discontinued in 1918. Otila was spelled "Botella" on the USC&GS Chart 1229, 1932.
271. Duck Post Office was established 1909.
272. Stratton and Hollowell, op. cit., 12.
273. R. H. Burgess, "Rugged Hikers Cover the Currituck Bank," Norfolk Virginian-Pilot, Feb 8, 1953.
274. Manteo Post Office was established 1873. The town was named after the friendly Indian chief from Croatoan Island who was taken to England by Amadas and Barlowe in 1584.
275. Private Laws of the State of North Carolina Passed by the General Assembly at Its Session of 1899 (Raleigh: Edwards and Broughton, 1899), 112, Chap. 66.
276. Skyco was named after Skyco, or Skiko, son of Menatonon, the Chawanoac chieftain in 1585. See Quinn, Roanoke, 247, 896, etc.
277. Stanton, op. cit., 12, 15.
278. Ibid., 17; Stevenson, op. cit., 170.
279. Sams, op. cit., 480.
280. Wanchese Post Office was established in 1886. The town was named after the Indian who had gone to England in 1584 with Manteo but who turned against the English in 1585.
A Manteo informant in 1955 said that at one time the Manteo area was known simply as "Upper End" and the Wanchese area "Lower End." The Lower End people grew to dislike the name because it denoted inferiority. Any mention of the name Lower End or allusion to the lower end of anything always caused trouble.
281. Sams, op. cit., 480.

CHAPTER VI

SUMMARY

Perhaps first vaguely thought of as an isthmus separating the Atlantic Ocean from a sea-route to the Orient, the North Carolina Outer Banks were later briefly considered as a base from which to colonize the mainland. Because the Banks did not have suitable harbors, they were immediately discarded as a site for a colony when reconnaissance showed the superiority of the Chesapeake. Permanent settlement of the Banks awaited the expansion of the Chesapeake settlements southward to the Albemarle and the quest of stock raisers for marsh and island areas for their stock. In order to serve the small riverine settlements and plantations in North Carolina, it was necessary that ships pass through the inlets among the Banks. The shallowness of the inlets and channels necessitated resident pilots at the inlets.

The original settlement sites were all, as they are today, in hammocks on the sound side. Since these wooded tracts were probably no more extensive in colonial days than they are today, the first settlers were not able to exercise a wide choice of site. In the past, there were rarely isolated homesteads. Houses tended to be concentrated in the larger hammocks. This nucleation is the most important characteristic of the settlement pattern of the Banks. The individual

settlements have always tended to demonstrate linear form, reflecting alignment along the shore, ridge, or road.

The early settlers of the Banks all derived immediately from the Albemarle region and from southeastern Virginia. Their culture traits, such as family names, topographic terms, and house types, to mention a few, are repeated in coastal Virginia and Maryland, indicating that the Bankers have an almost solidly English background and derive from the Chesapeake settlements.

The problems of navigation posed by this dangerous coast with its shallow inlets and channels were never resolved as long as ships of commerce tried to use the inlets. As roads, canals, and railroads improved in eastern North Carolina, commerce was increasingly diverted from the inlets, and the last use of the inlets by cargo vessels was around the turn of this century. The dangers of the coast made the Banks a "bulwark" of defense, a difficult coastline to which to lay siege. Since the early commerce of northeastern North Carolina was in great part carried on through the inlets, the Banks were personally involved in all wars up to and including the Civil War.

Fishing early became the most important single occupation on the Banks. Largely because of the shallowness of the sounds, the fisheries of the area became notable for the unusually large proportion of small boats used. This shallowness also precluded the establishment of certain fisheries in the sounds, for example menhaden, and may have accounted for some of the local modifications in gear. Much of the success in establishing commercial fisheries in the Carolina Sounds was due to the

importation of techniques and gear from the New England and Middle Atlantic states fisheries.

After the Civil War government service became a very important occupation among the Bankers, largely because of the great number of Life Saving (later Coast Guard) stations which were built beginning in the late 1870's. The passing of sailing vessels, the invention of communications devices such as radio and radar, and the advent of motor vehicles and paved roads has meant that the Coast Guard stations can now be more widely spaced.

In recent years, with the abandonment of most of the Coast Guard stations and the decline of commercial fishing, more and more Bankers have been turning to the tourist business. The seaside location and scenery early attracted summer visitors to Nags Head, but the great resort development did not come until bridges and paved roads made it possible for great numbers of tourists to come to the Banks. The advent of large numbers of tourists has meant improvements in transportation that the Bankers would not be otherwise enjoying. The resort business is contributing to the decline of commercial fishing by offering an easier alternative means of making a living. The resort development of the beach has spread northward from Nags Head past Kitty Hawk and could march up the beach to Virginia if the proposed toll road down Currituck Banks is ever constructed. This development is prevented from spreading southward because the entire beach from Bodie Island to Ocracoke Inlet is being preserved by the National Park Service as Cape

Hatteras National Seashore Recreational Area.

Among the recent changes on the Banks has been the passing of many of the old folkways. Most noticeably affected have been the material traits. Motor transport has caused the decline in small boat traffic and the demise of the local boat types. Modernization and centralization in the fishing industry has rendered many of the fisheries of the area uneconomic, and many old types of gear have become obsolete. Increasing style consciousness has caused a great variety of house forms to be introduced, and the old two-story, one-room-deep house with end chimneys which was virtually the sole type until this century is being disregarded. Less noticeable but just as real have been the changes in non-material traits such as speech, folklore, food habits, and social controls.

When one reduces the economic history of the Banks to a simple statement of stages, one sees that the progression has been from stock raising to fishing and finally to the tourist business. This pattern is by no means unique to the Outer Banks. It was first developed in the coastal areas and islands of New England and the Middle Atlantic states, such as Nantucket Island, Block Island, Long Island, and the coasts of New Jersey, Delaware, and Maryland. Natural evolution, not conscious repetition, caused this pattern to be repeated on the Outer Banks.

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III. NEWSPAPERS

David Stick's notes from the old newspaper holdings of the American Antiquarian Society, Worcester, Massachusetts, were helpful. For other items from old newspapers, see Wesley Wallace's thesis, University of North Carolina (above in Section I). Also useful were notes from the New York Shipping and Commercial List taken by John Lochhead of the Mariners Museum. A valuable file of modern newspaper clippings is in the North Carolina Collection of the University of North Carolina Library. In that file see various headings: "Coast," "Coast Changes," "Coast Guard," "Dare County," "Hatteras and Hatteras Island," and "Ocracoke."

APPENDIX A
INLET CHANGES IN HISTORIC TIMES

The sources used in compiling the accompanying map were the old maps of the area (see Appendix B), the Colonial Records, and scattered references in the literature. Naturally, in most cases, the newer maps are more reliable than the older ones, but it can be said that the first really accurate and proportionate map was the Moseley map of 1733. One can only guess at most of the changes in the 17th century. The dates of opening and closing are difficult to ascertain in many cases. Lacking contemporary record of the exact dates, one can only use the dates when they first and last appeared on maps. Since many years sometimes elapsed before the fact of opening or closing was duly noted by cartographers, this method is not wholly reliable, but, lacking better information, it is the only thing which can be done. Because precise information is generally missing for the location of inlets in the 16th and 17th centuries, it is perhaps best to think in terms of inlet zones and not worry about exact location. Quinn, in his map of "Raleigh's Virginia, 1584-90" (in the pocket at the end of vol. 2 of Roanoke), is perhaps too precise in his locations.

1. Old Currituck Inlet (1585-1731). This inlet was open when white men first appeared in the area. For the inlet situation in 1585 see White's map and also Quinn's map of

"Raleigh's Virginia, 1584-90." The date of closing of this inlet is a fairly accurate one. See Chapter 3, notes 43 and 44.

2. New Currituck Inlet (1713-1828). There is almost perfect agreement in the literature concerning these dates. See Chapter 3, note 43, and Chapter 4, note 13.

3. Musketo (1585-1671). For the existence of this inlet in 1585 see Quinn's map and also his discussion of this inlet in Roanoke, 856. Unnamed before 1671, it was called "Musketo" on Ogilby's map. It is not shown on Gascoyne's 1682 map or subsequent maps.

4. Carthys (1585-?, 1798-1811). This is the "Trinity Harbor" of the 1580's (Quinn, Roanoke, 863). It does not appear on the 1657 Comberford or subsequent maps. The inlet reappears and is named "Carthys" on the 1798 Price and Strother map. Of course, the inlet could have opened any time after 1770 because Collet's is the last original map preceding the Price and Strother map. For 1811 as the date of closing, see Chapter 4, note 15.

5. Roanoke (1585-1811). Open throughout the colonial period, Roanoke Inlet probably closed in 1811, although estimates have varied from 1795 to 1819. See Chapter 4, note 7.

6. Oregon (1585-1770, 1846-). This was the "Port Ferdinando" of White's day (Quinn, Roanoke, 863-864). It appears as "Gun" on Moseley's map and on Collet's 1768 map, but on Collet's 1770 map it was changed to "Gunt." It closed before 1798 because it does not appear on the Price and Strother map. The inlet opened again in 1846 and was subsequently named "Oregon." See Chapter 4, notes 26 and 27.

7. New (1708-1922, 1932-1945). The date of 1708 is a very arbitrary one. See Chapter 4, note 16, and Chapter 5, notes 22-24, 27-28. The inlet closed and opened again many times after 1932, but it has remained closed since 1945.

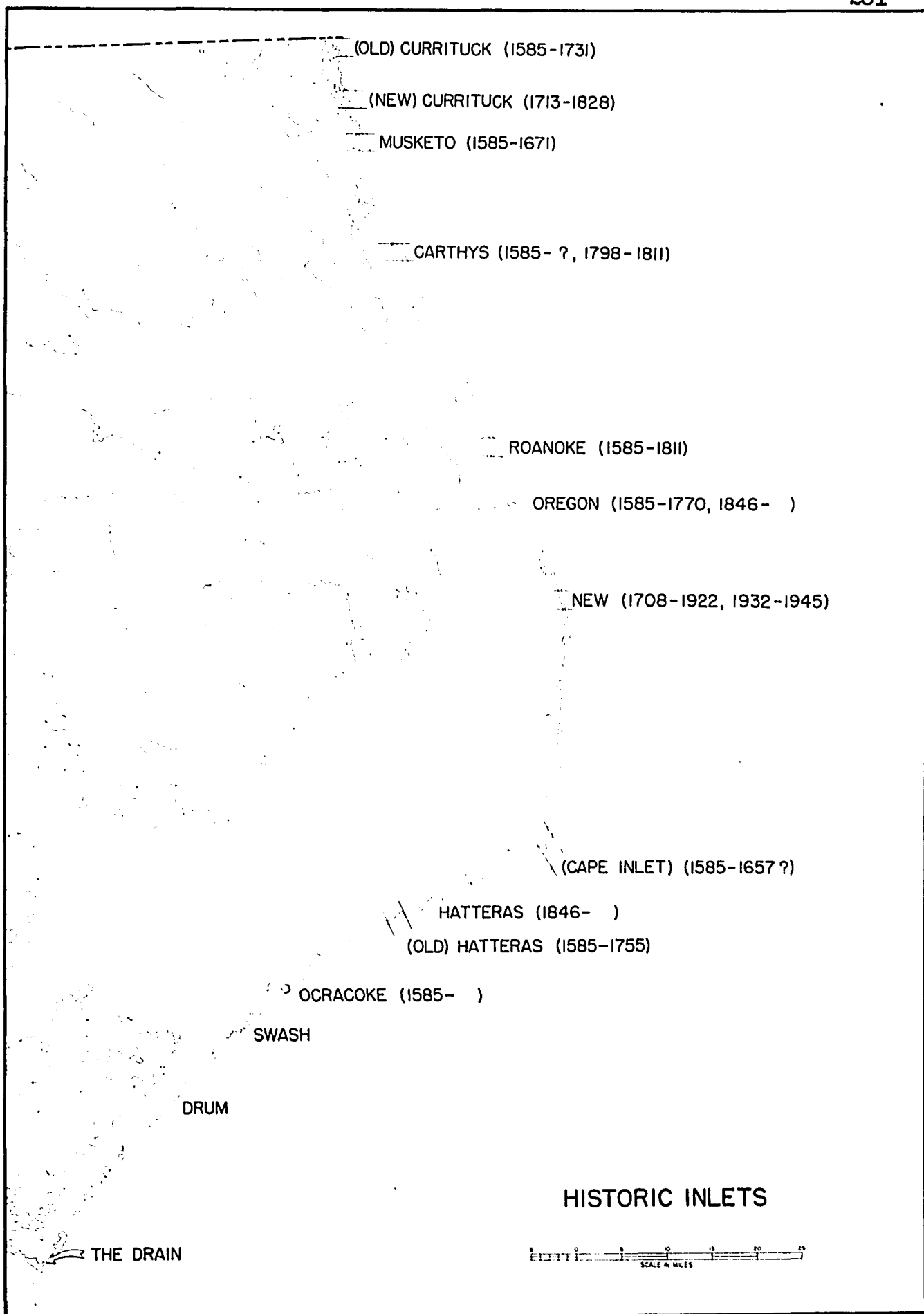
Because Loggerhead Inlet, only a couple of miles from New Inlet, was so close to the latter, it cannot be considered apart from New Inlet. Suffice it to say that Loggerhead existed in the New Inlet inlet zone. The inlet named Loggerhead which coexisted with New Inlet in the 19th century may have opened in 1846 or slightly earlier and was closed by 1881. See Chapter 4, note 26.

8. Cape (1585-1657?). This inlet was called "Chacandepeco" by the Indians (Quinn, Roanoke, 865-866) but was never given a name by the whites. It is shown on the Comberford map of 1657, but one has no assurance that this portion, at least, of the map was not copied from earlier maps.

9. Hatteras (1846-). The date of opening of Hatteras Inlet is incontrovertible. See Chapter 4, note 26.

10. Old Hatteras (1585-1755). The date of closing of Old Hatteras Inlet cannot be definitely established, but 1755 is not an unreasonable guess. See Chapter 3, notes 41 and 42.

11. Ocracoke (1585-). An inlet has been open in approximately this location since 1585, but it is impossible to state definitely that the present inlet has existed since that time.



APPENDIX B

MAPS IMPORTANT TO THIS STUDY (1529-1807)

Included in the list below are the significant maps, mostly original surveys or containing new information, from Verrazano's mappamundi to the beginning of government surveys in the area. After 1807 the most detailed and accurate maps were those done by the Corps of Engineers and the Coast Survey (later Coast and Geodetic Survey). For the most part, the originality and significance of the maps on this list were made known to the writer by Dr. William P. Cumming of Davidson College, the foremost authority on old maps of the Southeast, whose definitive study of that broad topic will be published next year by the Princeton University Press. However, none of the errors of omission or commission on this list can be attributed to Dr. Cumming.

1. 1529, world map, Girolamo Verrazano. See Chapter 2, notes 1-7.

2. 1585, John White. Map shows the coastal area from Chesapeake Bay to Cape Lookout. See also White's companion map of the area from the Chesapeake to Florida, the only original part of which is that shown on the larger-scale map. See Quinn, Roanoke, 460-461. See Chapter 2, note 34.

3. 1585, anonymous sketch map. This map shows the areas around Albemarle and Pamlico Sounds. It has been attributed to John Smith and dated 1618, but Quinn presents a convincing argument in favor of its being a sketch map from the Lane expedition. See Quinn, Roanoke, 215-217.

4. 1657, "The South Part of Virginia," Nicholas Comberford. This shows the areas around Albemarle and Pamlico sounds. See Quinn, Roanoke, 864. See also W. P. Cumming, "The Earliest Permanent Settlement in Carolina. Nathaniel Batts and the Comberford Map," American Historical Review, vol. 45, no. 1 (October, 1939), 82-89. Copies of this map can be seen in the Library of Congress and the North Carolina State Department of Archives and History.

5. 1671, "A New Description of Carolina" ("The First Lord Proprietors' Map"), Ogilby. See W. P. Cumming, "Geographical Misconceptions of the Southeast in the Cartography of the Seventeenth and Eighteenth Centuries," Journal of Southern History, vol. 4, no. 4 (November, 1938), 476-492. There is a copy of this map in the Duke University map collection.

6. 1679, James Lancaster, Blathwayt Atlas no. 21. This map shows the area around Albemarle Sound. The original map is in the John Carter Brown Library, and the Library of Congress has a photostat copy.

7. 1682, "A New Map of the Country of Carolina" ("Second Lord Proprietors' Map"), Joel Gascoyne. Information for this map came from Maurice Mathews, Surveyor General of Carolina. This map shows the area between Cape Henry and St. Augustine. A copy can be seen in the Map Division of the Library of Congress.

8. 1684, "North Carolina," William Hack. The original is British Museum Additional MS 5415.G.6, and there are photostat copies in the map collections of the Library of Congress and the North Carolina State Department of Archives and History.

9. c1685, "A Plat of the Province of Carolina," Joel Gascoyne. Like number 7 above, this map was printed by Gascoyne from Mathews' information. The original is B. M. Add. MS. 5414.24. The Library of Congress photostat copy is dated 1682, and that of the North Carolina State Department of Archives and History is dated c1700.

10. 1708, Thomas Nairne. See Chapter 3, note 20. Lawson's 1709 map was apparently a direct copy of Nairne's. These maps show the area from Cape Henry to St. Augustine. There are many copies and reproductions of Lawson's map available--in the Library of Congress, Duke University, N. C. State Department of Archives and History, etc.

11. 1733, "A New and Correct Map of the Province of North Carolina," Edward Moseley. Chapter 3, note 23.

12. 1738, "Chart of His Majesties Province of North Carolina," James Wimble. There are copies of Wimble's map in the N. C. State Department of Archives and History and in the Cartographic Records Branch of the National Archives (R.G. 77, Roll H-62).

13. 1756, "Chart of the Coast of America from Cape Hatteras to Cape Roman," Daniel Dunbabin. Dunbabin made his survey in 1756, but the map was first published in 1792 in John Norman's The American Pilot (also in 1794, 1798, and 1803 editions). See Chapter 3, note 42.

14. 1768, I. (John) A. Collet. The area of the map is North Carolina. There are no names on the map below the north end of Hatteras Island. The original map is in the King George Collection, British Museum, Crow Coll. 122.52 and 122.50. There is a photostat copy in the Library of Congress.

15. 1770, "A Compleat Map of North Carolina from an actual Survey," John Collet. This is not the same as the 1768 map. Unfortunately, not all parts of the 1770 map are of equal age and reliability. For example, the coastal detail in the Beaufort-Cape Lookout area was taken from Wimble's 1738 map. Many later maps, including Mouzon's, are based on Collet's 1770 map, and there are curious errors on these later maps as a result of copying Collet. On the north end of Roanoke Island the names "Pain" (householder) and "Fort" (Fort Raleigh) later were erroneously connected as "Pain Fort." See Frederick Tilberg, "Observations on Maps in Connection with the Site of Fort Raleigh," Undated typescript [1936] in the files in the Office of the Historian, National Park Service, Washington, D. C. Similarly "Daniels" and "Marshes" were wrongly connected at the south end of Roanoke Island. Close examination of the Collet map shows that these names are not connected, but later cartographers joined them.

16. 1798, "Survey of the Sea Coast and inland Navigation from Cape Henry to Cape Roman," Price and Strother. Copy in the Map Division of the Library of Congress.

17. 1806, "A Chart of the Coast of North Carolina between Cape Hatteras and Cape Fear," Thomas Coles and Jonathan Price. Copy in the Cartographic Records Branch of the National Archives (R. G. 77, Roll H-22). See Coles and Price, Report of the Commissioners Thomas Coles and Jonathan Price to Survey the Coast of North Carolina, n. p., n. d. [Washington? c1807-].

18. 1807, "Rough Hydrographick Map of the N: Carolina Junction Canals," William Tatham. This map is in the Manuscript File of the Map Division, Library of Congress. See Tatham, "The separate Report of William Tatham one of the Commissioners appointed to survey the Coast of North Carolina from Cape Hatteras to Cape Fear inclusive, under the Act of Congress of the 10th of April last," January, 1807, Unpublished MS in the library of the U. S. Coast and Geodetic Survey, Washington, D. C.

Tatham's and Coles' and Price's maps really represent the beginning of official mapping in the area. They conducted their

surveys under the sponsorship of the Treasury Department. Tatham's map does not constitute part of his report. He tried unsuccessfully to interest Congress in buying the map as well as some of his other materials, but the map was never published. Although Congress began authorizing such surveys in 1807, it was not until 1816 that an organization, known as the Survey of the Coast, was established in the Treasury Department for the purpose of systematic mapping of coastal areas.

APPENDIX C
COUNTY BOUNDARY CHANGES

In order to deal with county records and censuses, one must know what boundary shifts have taken place on the Banks. With one exception, which will be mentioned at the end of this appendix, all information about county boundary changes can be found in D. L. Corbitt, The Formation of the North Carolina Counties, 1663-1943 (Raleigh: State Department of Archives and History, 1950). The following is a synopsis of the material in Corbitt bearing on the Banks. The numbers in parentheses refer to pages in Corbitt.

Currituck County was originally Currituck Precinct of Albemarle County. Founded in 1670, Currituck was one of the original four precincts of Albemarle County (83). As it evolved, Currituck came to include all of what is now Currituck County as well as Roanoke and Colington islands and the Banks from the Virginia line south to Old Hatteras Inlet.

Carteret Precinct was formed from Craven in 1722, when it was decided to make "Core sound a seperate Precint [sic] from Craven." Carteret thus included all of Core Banks (57).

Thus, when the Banks were first being settled, all of the Banks down to Old Hatteras Inlet were in Currituck County, and all south of Ocracoke Inlet were in Carteret. In 1770, when it was seen that "Part of Hatteras Banks, adjoining the

Bounds of Currituck County, from the Place where Hatteras Inlet formerly was, and extending Westward to Ocacock Inlet, is not included in any County within this Province," this area was added to Carteret County (57).

Until 1823 the only counties having land on the Banks were Currituck and Carteret, and the boundary between the two was the site of the former Hatteras Inlet. In 1823 "all that part of Currituck county, which lies South of New Inlet" was "added to the county of Hyde" (84, 126).

In 1845 Hyde received from Carteret that portion of the Banks between Ocracoke Inlet and Old Hatteras Inlet (58, 126). After 1845 Carteret retained only that area of the Banks which it had before 1770--Core Banks.

In 1870 a new county, named Dare County, was formed out of parts of Currituck, Hyde, and Tyrrell (84, 85, 126, 209). This new county included all of the Banks from Hatteras Inlet up to, but not including, Kitty Hawk, and also Roanoke and Colington islands. Currituck retained control of the Banks north of Kitty Hawk Bay. Hyde retained Ocracoke Island.

Corbitt does not mention the Act in 1919 by which Atlantic Township of Currituck County, Caffey's Inlet to Kitty Hawk, became part of Dare County. This Act can be found in Public Laws and Resolutions of the State of North Carolina Passed by the General Assembly at Its Session of 1919 (Raleigh: Commercial Printing Company, 1919), 239-240, Chap. 163.

Thus, at present, Carteret still has Core Banks, Ocracoke Island belongs to Hyde, Dare extends from Hatteras Inlet north to

Caffey's Inlet and includes Roanoke and Colington islands, and Currituck's holdings on the Banks run from Caffey's Inlet to the Virginia line.

VITA

Gary Seamans Dunbar was born on June 8, 1931, in Clifton Springs, New York, the son of Alvin Robert and Esther Seamans Dunbar. His early life was spent entirely in western New York State, in the towns of Newark, Geneva, Corning, Wellsville, and Avon. He graduated from Avon High School in 1948. In September, 1948, he entered the University of Virginia, from which he received the Bachelor of Arts degree in 1952 and the Master of Arts degree in 1953. He enrolled at Louisiana State University in September, 1953, for further graduate work.

He was married on April 4, 1953, in Rochester, New York, to the former Elizabeth Ann Tighe. They have one child, a daughter, Emily Gillian, age two.

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Title of Thesis: Historial Geography of the North Carolina Outer Banks

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Date of Examination:

May 31, 1956